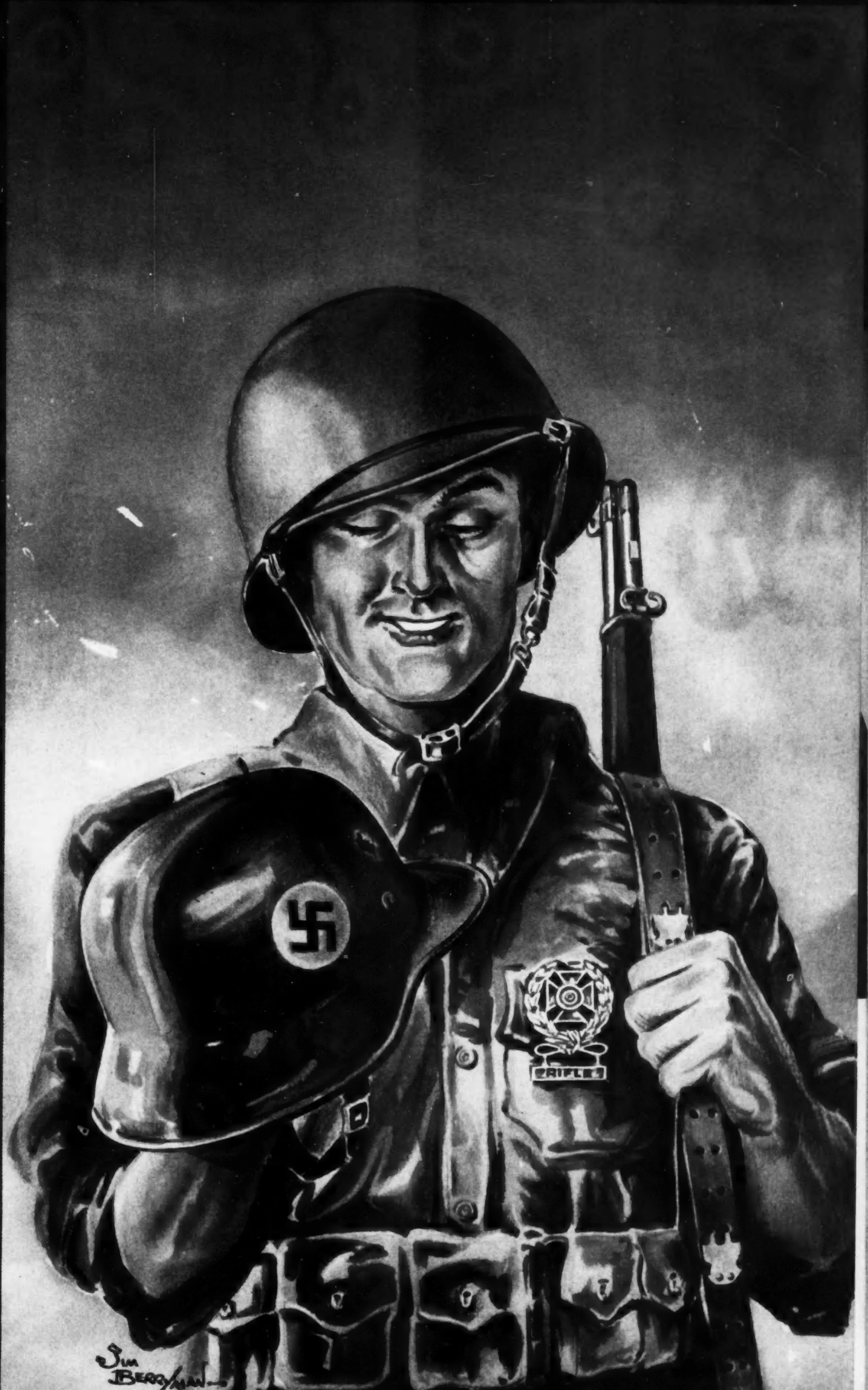
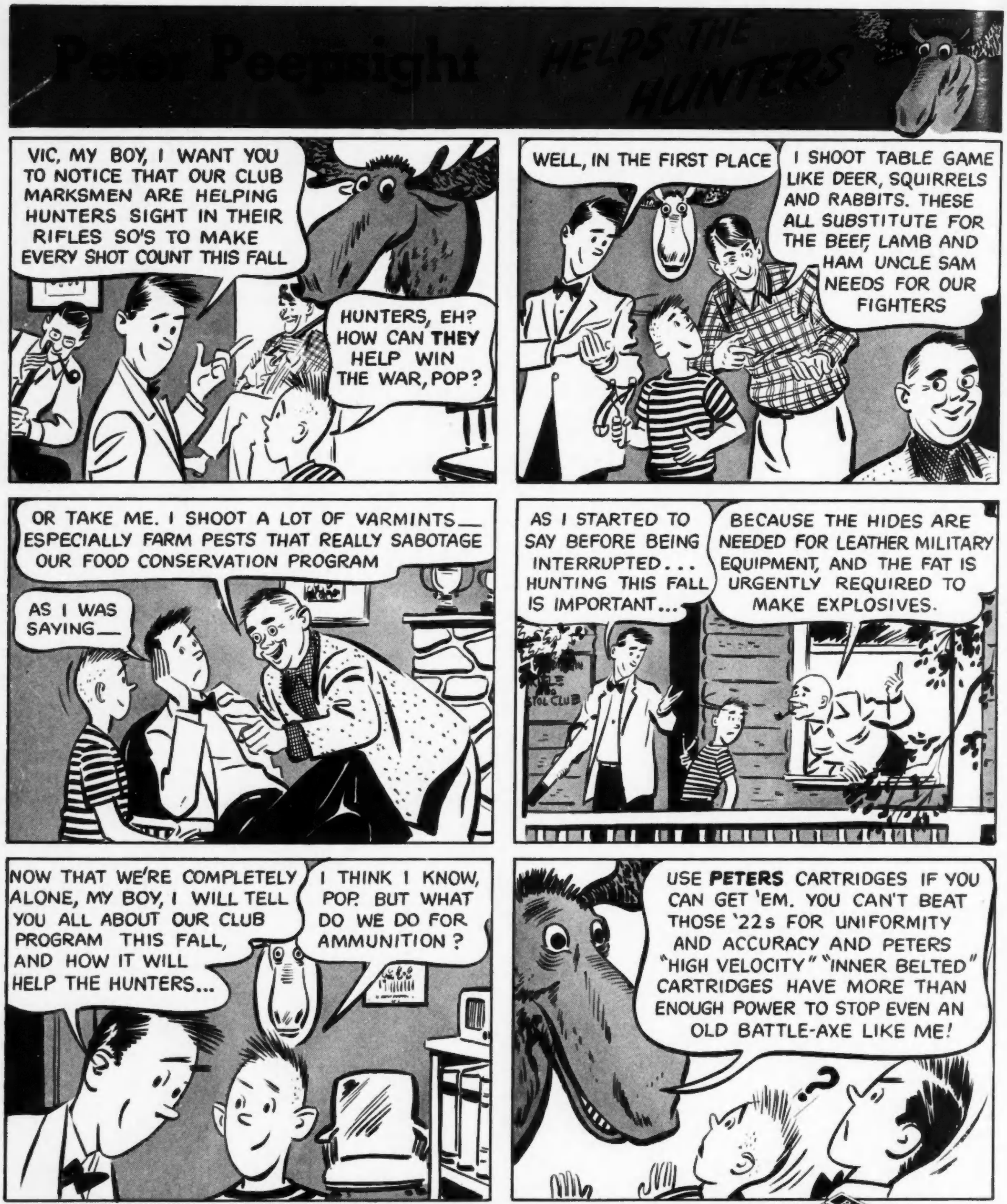
AMERICAN RIFLEMAN

25 CENTS


RIFLES
Jim Berryman

V91—10 OCT 43
XUM


Peter Peepsight
HELPS THE HUNTERS
VIC, MY BOY, I WANT YOU TO NOTICE THAT OUR CLUB MARKSMEN ARE HELPING HUNTERS SIGHT IN THEIR RIFLES SO'S TO MAKE EVERY SHOT COUNT THIS FALL
HUNTERS, EH? HOW CAN THEY HELP WIN THE WAR, POP?
WELL, IN THE FIRST PLACE
I SHOOT TABLE GAME LIKE DEER, SQUIRRELS AND RABBITS. THESE ALL SUBSTITUTE FOR THE BEEF, LAMB AND HAM UNCLE SAM NEEDS FOR OUR FIGHTERS
OR TAKE ME. I SHOOT A LOT OF VARMINTS— ESPECIALLY FARM PESTS THAT REALLY SABOTAGE OUR FOOD CONSERVATION PROGRAM
AS I WAS SAYING—
AS I STARTED TO SAY BEFORE BEING INTERRUPTED... HUNTING THIS FALL IS IMPORTANT...
BECAUSE THE HIDES ARE NEEDED FOR LEATHER MILITARY EQUIPMENT, AND THE FAT IS URGENTLY REQUIRED TO MAKE EXPLOSIVES.
STOL CLUB
NOW THAT WE'RE COMPLETELY ALONE, MY BOY, I WILL TELL YOU ALL ABOUT OUR CLUB PROGRAM THIS FALL, AND HOW IT WILL HELP THE HUNTERS...
I THINK I KNOW, POP. BUT WHAT DO WE DO FOR AMMUNITION?
USE PETERS CARTRIDGES IF YOU CAN GET 'EM. YOU CAN'T BEAT THOSE '22s FOR UNIFORMITY AND ACCURACY AND PETERS "HIGH VELOCITY" "INNER BELTED" CARTRIDGES HAVE MORE THAN ENOUGH POWER TO STOP EVEN AN OLD BATTLE-AXE LIKE ME!
?

PETERS

Rifle and Pistol Ammunition

PETERS CARTRIDGE DIVISION, *Remington Arms Co., Inc., Bridgeport, Conn.*

"High Velocity" is Reg. U. S. Pat. Off.; "Inner Belted" and "Police Match" are trade marks of Peters Cartridge Division.

DUPONT

POLICE MATCH
PETERS
Rustless
POLICE MATCH
PETERS
HIGH VELOCITY
.30-06 SPRINGFIELD
INNER BELTED
PETERS
30-06
Rustless

THE
AMERICAN
RIFLEMAN

SUBSCRIPTION RATES

Year - - - $3.00
Years - - - $5.00

V91 — 10 OCT 43 XUM

THE
AMERICAN
RIFLEMAN

**SUBSCRIPTION
ORDER**

Detach Stub

Before Mailing

ENLIST YOUR DOLLARS ★ ★ ★ ★ ★ BUY WAR SAVINGS BOND

"*Eyes Right*" has never meant so much to America

Keen-eyed American fliers are telling Hitler and Tojo the inside story of democratic "decadence"—telling it in flaming emphasis—with two-ton bombs, torpedoes, machine gun fire. In selecting and training the boys who carry these messages, American military authorities employ the most critical physical examination and intense conditioning program. Throughout, particular attention is given to perfection of vision.

Nor is the importance of eyesight efficiency and visual care confined to the air fronts of this global war. On America's production lines, we cannot afford to waste time, to spoil materials through faulty vision.

Bausch & Lomb is supplier of eye examination instruments, lenses and eyewear to the military forces—as well as to the thousands of professional and technical men throughout America whose specialized skills keep civilian eyes at top performance levels. Producer, too, of a host of fighting optical instruments—range-finders, binoculars, anti-aircraft height-finders, photographic lenses, equipment for industrial research and control.

Here again, optical science is *seeing it through.*

BAUSCH & LOMB
OPTICAL CO. ROCHESTER, N. Y.

ESTABLISHED 1853

AN AMERICAN SCIENTIFIC INSTITUTION PRODUCING OPTICAL GLASS AND INSTRUMENTS FOR MILITARY USE, EDUCATION, RESEARCH, INDUSTRY AND EYESIGHT CORRECTION

V91—10 OCT 43
XUM

A veteran member of Colt's team of expert craftsmen for 42 years, Fred A. Southwick, is supervisor in the cylinder department. Skilled hands like his are responsible for the precision that means higher scores on the shooting range.

THIS TEAM HITS A 1/1000-INCH BULL'S-EYE

It's a mighty exclusive pistol team that stages a meet every working day at Colt's. They're masters of their craft and steeped in the tradition of Colt precision. The bull's-eye they hit is often limited to a few ten-thousandths of an inch – a fraction of the diameter of a human hair.

These skilled hands working to fine limits make possible your bull's-eyes on the range. Gives you confidence, doesn't it, to have a Colt in your hand – assuring that you will do your best!

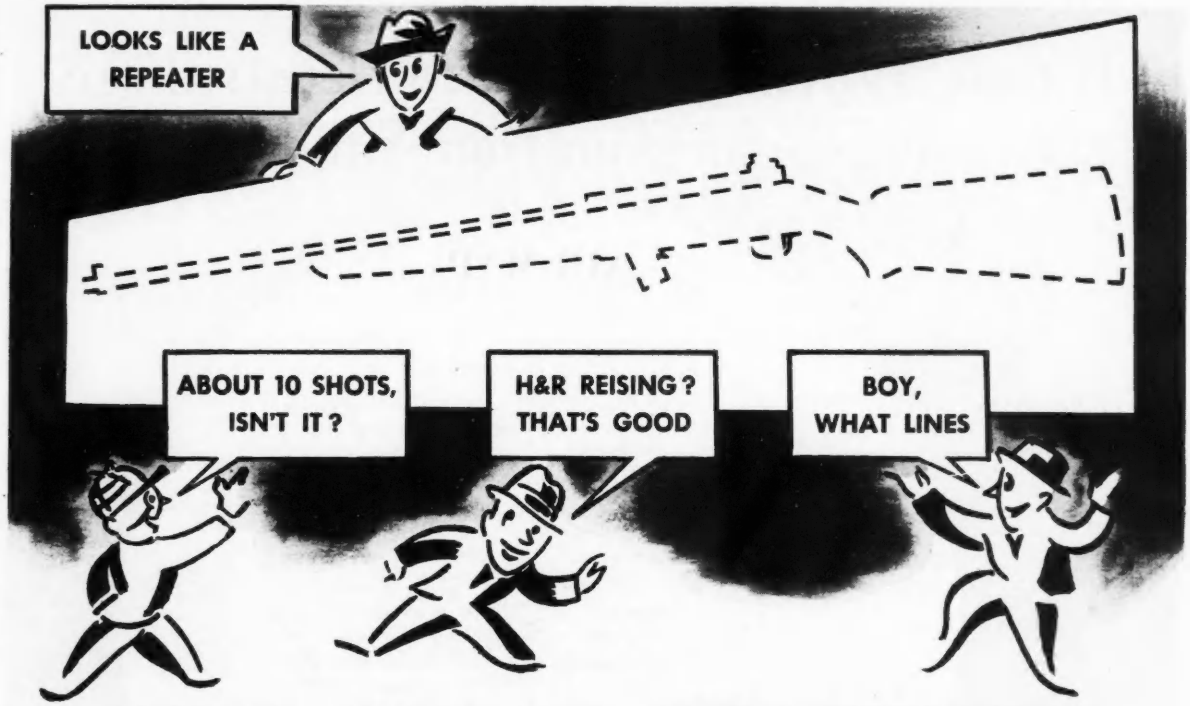
The next time you face a target – remember the team of master craftsmen who have hit their pin-point bull's-eyes time and again while turning out the precision target revolver in your hand – hitting their bull's-eyes so you and your team will hit yours. They're as proud of your high scores as you are.

You'll want the set of Colt Historical Prints

Frontier skirmishes with Indians . . . heated clashes of Civil War . . . the headlong dash of the Pony Express . . . the "Colt justice" dealt out by men with hair on their chests! Yes, six historic Colts, in perfect detail, talk to you from their scenic backgrounds pf yesterday's adventurous days! You men who delight in the bark of a revolver and the smell of burnt-powder will want a set of these ready-to-frame prints for your den or gun room. Limited supply, but just 25¢, coin or stamps, will bring your set postpaid now. Address: Colt's Patent Fire Arms Mfg. Co., Dept. A, Hartford, Connecticut.

COLT

COLT'S PATENT FIRE ARMS MFG. CO.
HARTFORD, CONNECTICUT



THIS SPACE RESERVED

for a Great New Sporting Rifle

HERE'S A PROPHECY for post-war that's no mere pipedream: *you're going to see an H&R gun you'd be glad to pay $100 for* . . . but you'll buy it brand new for less than *one-third* that price! No details can be revealed but we'll tell you this:

It's a Sporting Rifle—unprecedented in Harrington & Richardson's long guncrafting history . . . a natural outgrowth of our busy war production, and a gun we *know* we can make *well* in *large* quantities.

You've read about the famous H&R Reising Submachine Gun, one of the wonder-weapons of World War II . . . a light, powerful automatic gun that operates on the delayed recoil principle.

This new rifle was designed by the same man—Eugene G. Reising, holder of some 60 firearms patents and 150-odd shooting trophies. His *new* H&R rifle is already in production for military training purposes . . . *it will be ready in civilian dress as soon as Victory is won.*

This great new H&R Reising Sporting Rifle is only one of many fine post-war H&R guns now definitely "in the works." There'll be some of H&R's standard favorites—shotguns, revolvers, and pistols—plus other *new* developments.

The big job now: work to win the war. *Buy more war bonds . . .* you'll be glad you did, later, when so many good things can again be bought at reasonable prices.

HOW TO BUY TOMORROW'S H&R GUN TODAY

Buy a War Bond now—put it in an envelope marked "Harrington & Richardson Gun." Every year you hold it, that bond will increase in value . . . and after Victory, your investment today will buy one of the best H&R guns ever made!

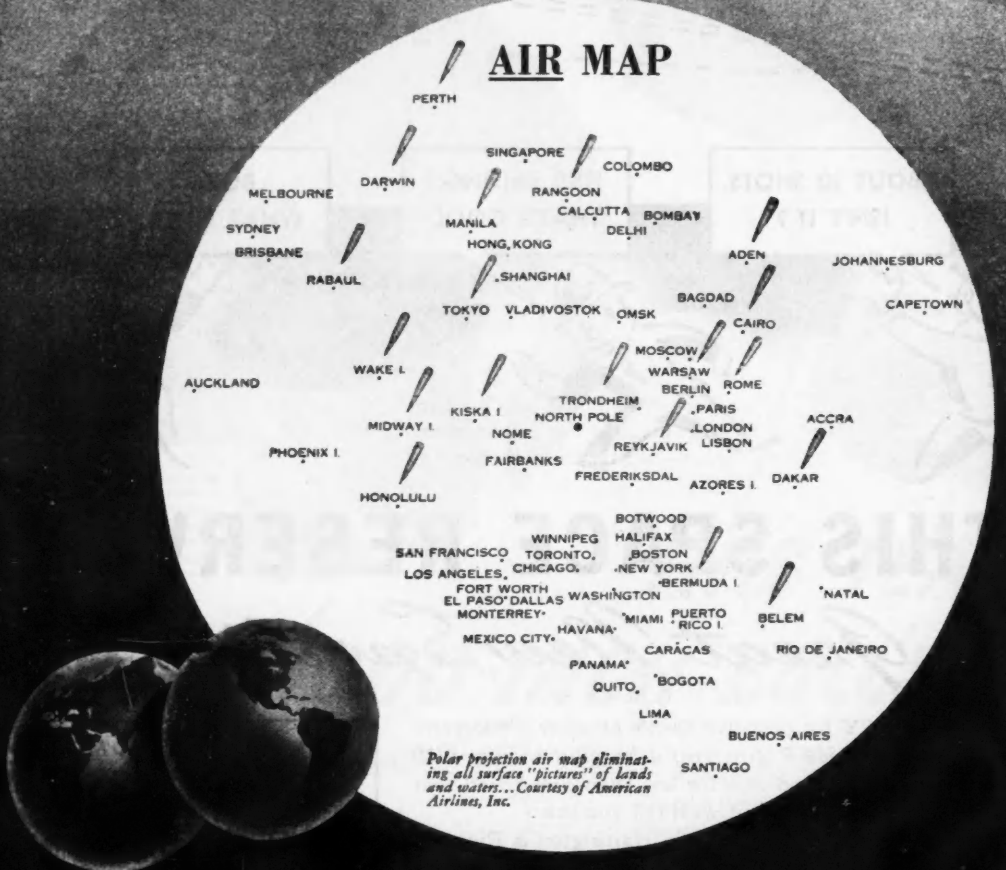
FREE! to gun fans—The Manual of the H&R Reising Submachine Gun. Detailed photographs, drawings, and descriptions of assembly and disassembly, functioning, care and cleaning, marksmanship, etc. ALSO now in preparation: the catalog of the H&R wartime line. Write for your copies of either or both. Address Harrington & Richardson Arms Company, Worcester 2, Massachusetts, U.S.A.

H&R

FINE FIREARMS

For Sportsmen, Police, and the Military

It took WINCHESTER ... to Defeat these 3 Invisible Ammunition Saboteurs



AIR MAP
PERTH
SINGAPORE
COLOMBO
MELBOURNE
DARWIN
RANGOON
CALCUTTA
BOMBAY
SYDNEY
MANILA
DELHI
BRISBANE
HONG KONG
ADEN
JOHANNESBURG
RABAUL
SHANGHAI
BAGDAD
CAPETOWN
TOKYO
VLADIVOSTOK
OMSK
CAIRO
MOSCOW
WARSAW
AUCKLAND
WAKE I.
BERLIN
ROME
TRONDHEIM
PARIS
KISKA I.
NORTH POLE
LONDON
ACCRA
MIDWAY I.
NOME
REYKJAVIK
LISBON
PHOENIX I.
FAIRBANKS
FREDERIKSDAL
AZORES I.
DAKAR
HONOLULU
BOTWOOD
WINNIPEG
HALIFAX
SAN FRANCISCO
TORONTO
BOSTON
CHICAGO
NEW YORK
LOS ANGELES
BERMUDA I.
FORT WORTH
NATAL
EL PASO
DALLAS
WASHINGTON
MONTERREY
MIAMI
PUERTO RICO I.
BELEM
HAVANA
MEXICO CITY
CARACAS
RIO DE JANEIRO
PANAMA
QUITO
BOGOTA
LIMA
BUENOS AIRES
SANTIAGO

Polar projection air map eliminating all surface "pictures" of lands and waters... Courtesy of American Airlines, Inc.

COPR., 1943, WINCHESTER REPEATING ARMS CO., DIV. OF WESTERN CARTRIDGE CO.

IN this global war, 3 invisible enemies—heat, cold and humidity—are constantly trying to sabotage our ammunition.

Here's the story. Of the 4 component parts of each cartridge . . . case, bullet, powder charge and primer . . . *the primer is most important. It* ignites the powder charge when the firing pin falls.

Highly sensitive, primers must also be completely stable. Extremes of heat, cold and humidity . . . all three . . . fight to sabotage their efficiency. This must not happen whether the cartridges are used . . . in the fiery-hot steaming jungles of Guadalcanal, the cold wind-swept reaches of Iceland, the rain-lashed plains of Tunisia or the sub-zero air in which our planes fly.

It doesn't—thanks to Winchester. For today, as in World War I, U. S. military ammunition has been standardized to a primer mixture developed by Winchester. . . . a primer that's *geared to global climate—stable at all times.*

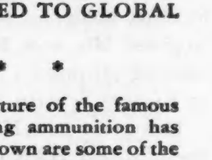
So whether your soldier is a gunner in a flying fortress, a paratrooper equipped with a Winchester Carbine, a battalion machine gunner, or one of the million soldiers-of-the-line equipped with a Garand . . . you can be sure his ammunition is okay.

WINCHESTER REPEATING ARMS CO.
New Haven, Conn., U. S. A.
Division of WESTERN CARTRIDGE COMPANY

WHEN PEACE COMES, SPORTSMEN WILL DO WELL TO REMEMBER THAT WINCHESTER AMMUNITION IS GEARED TO GLOBAL CLIMATE

* * *

Peacetime manufacture of the famous Winchester sporting ammunition has naturally ceased. Shown are some of the military cartridges Winchester is currently producing. (Top to bottom) Caliber .50 machine gun Tracer; caliber .30 for Garands and machine guns; caliber .30 for Winchester Carbines.



WINCHESTER
TRADE MARK

"On Guard for America Since 1866"

RIFLES • SHOTGUNS • CARTRIDGES • SHOTSHELLS • FLASHLIGHTS • BATTERIES • RADIATOR TUBES

The Official Journal of The National Rifle Association of America

THE AMERICAN RIFLEMAN

C. B. LISTER, *Managing Editor*
F. C. NESS, *Technical Editor*
E. B. MANN, *Associate Editor*
W. F. SHADEL, *Editor*
C. M. PALMER, JR., *Associate Editor*
I. T. BERRYMAN, *Art Director*
L. Q. BRADLEY, *Circulation*

THE AMERICAN RIFLEMAN

THE COVER: This month, by Staff Artist Jim Berryman, a picture of the end toward which we all are working: the end of a Nazi. There's a sermon in this cover picture, too. Teach our fighting men to shoot, to put their slugs through the other guy's helmet before he can put a slug through theirs—give them the guns to drive those slugs true to the mark, and armor (better than that used in the Nazi helmet pictured) to protect them while they shoot—and they'll do the job!

THIS MONTH

"Is the Pistol a Dodo?" by E. B. Mann, new RIFLEMAN Staff member, is a handgunner's argument against the tendency of war planners to push the pistol out of the military picture. It still has a place in that picture, and in the post-war world as well.

We Look for Trouble—And Get It! by Capt. Charles S. Schwartz, tells the story of that unsung hero, the battle-field mechanic who works under fire to yank tanks and guns out of the junkheap back into active service. It's a job that calls for initiative, imagination—and guts!

"How Far Is Far?" by Bill McCandlass, is a timely revival of the lesson every hunter should learn (and too few do learn): not to shoot till you can see the white of their eyes! Accurate range estimation means clean kills, fewer cripples, and less gun-weight to carry.

E. Baden Powell's popular series, "Killing Power", ends in our next issue and, hastened by the acclaim it has received here, will be published in book form soon thereafter. "Simplified Small Arms Ballistics", by The Old Coach, continues its popular run with the subject introduced in Chapter IV last month, "Powder and Primer." Furnishing a background for most all RIFLEMAN subjects, the series will undoubtedly end up in handbook form for reference and review of basic principles, terms, and fundamentals of ballistics.

VOLUME 91 NUMBER 10

OCTOBER

Is the Pistol a Dodo? 6
BY E. B. MANN

Now We Learn Again 9
AN EDITORIAL

We Look for Trouble—And Get It! 10
BY CAPT. CHARLES S. SCHWARTZ

Out of the Woods 14
BY EDMUND WATERS

How Far Is Far? 17
BY BILL MCCANDLASS

The Grand American 20
BY FRITZ HOWELL

That Elusive Best Cartridge 22
BY WILLIAM A. CARUTH

Double Action Automatic 23

What They're Totin' 24

If You Can't Buy It, Make It! 24

Killing Power, Part VI 25
BY E. BADEN POWELL

Simplified Small Arms Ballistics 28
BY THE OLD COACH

Powder Smoke 34

Dope Bag 38

JUDGE HILLARD COMSTOCK .... *President*
★ LT.-COMMANDER THURMAN RANDLE *Vice-President*
★ MAJOR-GENERAL MILTON A. RECKORD *Executive Vice-President*
C. B. LISTER.................. *Secretary-Treasurer*
L. Q. BRADLEY.................. *Assistant Secretary*

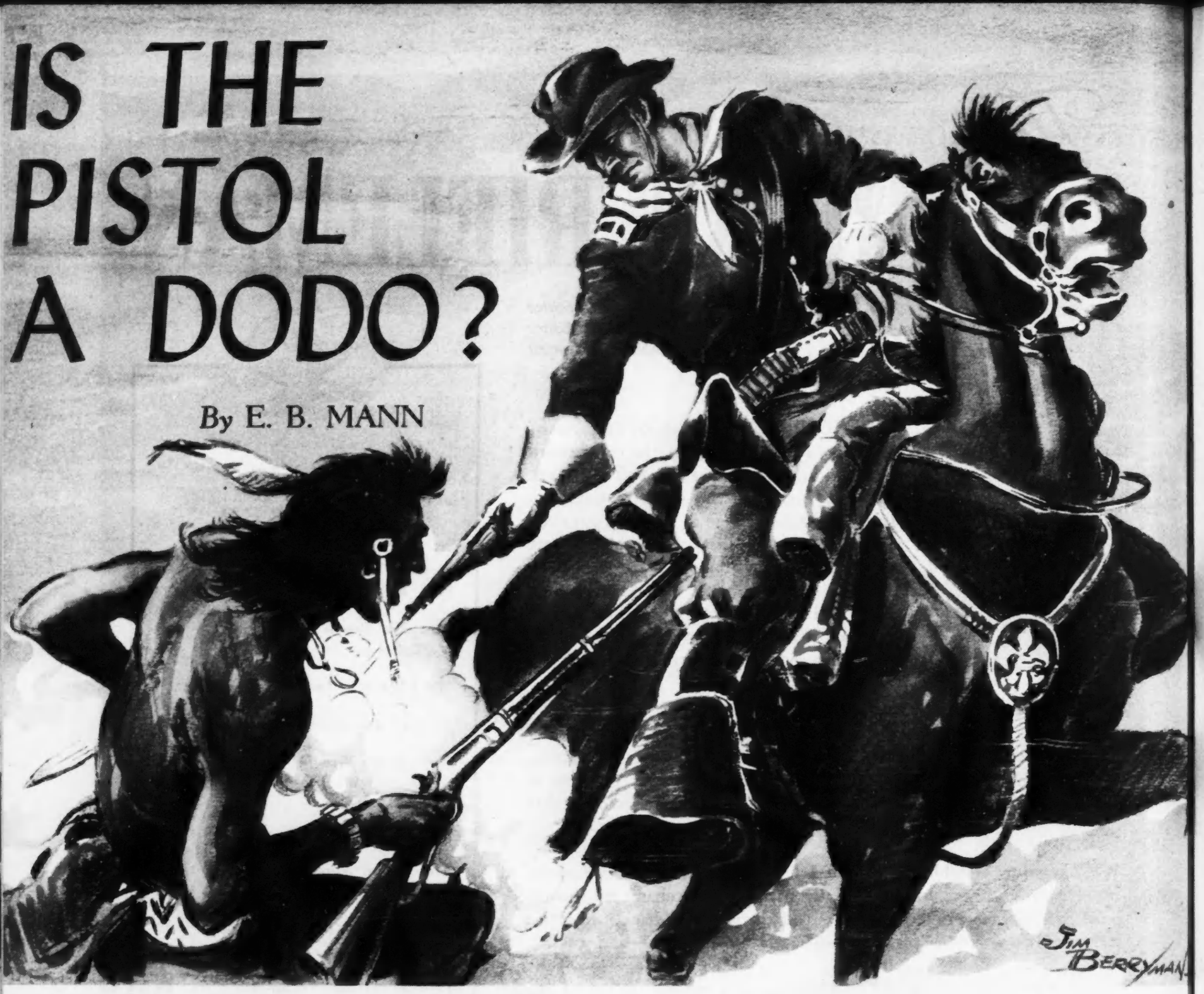
J. R. LENT.......................... *Operations*
C. R. ROGERS.......................... *Training*
A. H. BARR.................. *Technical Ass't*
E. M. CHASE.......................... *Cashier*

★ *In the Service*
★ T. W. CHILD
★ J. FAUNTLEROY
★ J. A. HARPER
★ J. K. SCOFIELD
★ F. L. WYMAN
★ F. A. MOULTON
★ R. J. STAN
★ F. C. DANIEL

Published monthly by The National Rifle Association of America, 1600 Rhode Island Avenue, Washington, D. C. Domestic rates, including all of North, South and Central America, $3.00 a year; $5.00 for two years; elsewhere, $3.60 a year; $6.50 for two years. Entered as second-class matter, April 1, 1908, at the Post Office at Washington, D. C., under Act of March 3, 1879. *Copyright, 1942, by The National Rifle Association of America.*

IS THE PISTOL A DODO?

By E. B. MANN



"IT PROVIDED MANY A LESSON TO INDIANS AND OTHERS CHARGING TROOPS WHOSE RIFLES WERE EMPTY"

WITH THE ARMY SEEMINGLY SWITCHING its allegiance away from the pistol to an assortment of carbines and sub-machine guns, a lot of handgun addicts are wondering whether the pistol is a dead duck, doomed to oblivion along with the pike and the longbow.

My answer is—No!

In fact, I'll even go out on a limb and predict that the handgun and handgun competition will hit new highs after the war, as a *direct outgrowth* of war conditions.

In spite of the nostalgic indignation of pistol lovers over the much-publicized trend in some military circles away from hip-artillery, more thought and more complete information should convince that there are arguments on both sides of the question and that, after all, no really fundamental change is taking place.

The pistol has never been a basic military weapon—except in the Cavalry where, for a time, it shared honors with the saber in the equipment of "light cavalry" units. Even there, by the time of the American Civil War, the carbine had muscled in on the pistol. The cavalryman became, to all intents and purposes, a mounted rifleman. But the pistol still rode in Cavalry holsters and (especially after it became a repeating arm) it provided many a salutary lesson to Plains Indians and others who thought that, having drawn the fire of the rifles, they could ride down troops who should have been busy reloading!

That was in-fighting. There the pistol shines!

As an in-fighter the pistol starred in World War One. Here again it was not a basic weapon but an auxiliary one, a personal side-arm, issued to officers and non-coms, to specialists, and to certain units not armed with rifles. But many men to whom no pistol was ever issued carried a pistol. They were the most prized item in the loot of battle and no handgun ever remained very long in a dead man's holster!

Plenty of World War One veterans will tell you of instances of lives saved and individual engagements won with the handgun. Similar instances will come (and have come already) out of the present war. But the fact remains that these incidents come out of close in-fighting. While the pistol is supreme in close combat it is still auxiliary to the longer-ranged *basic* weapons.

If that be treason, make the most of it. The point is, it's not treason. I'm as loyal to the pistol as the next man. I wouldn't trade mine for any rifle ever bored, or for any shotgun either.

But look at it from the standpoint of the men who have to plan the training of our multi-million-man Army. The pistol "just ain't the same breed o' cats" as the rifle. Firing it well requires a different technique, a separate and distinct program of training. Replace it with the carbine or with the sub-machine gun and the basic training given each man with the rifle applies also to these new weapons. That certainly simplifies his training. If it shortens that training by as much as one day, that, in terms of an Army the size of ours, is a lot of man-hours.

Add to that the matter of increased firepower—firepower that is more effective in the hands of the average soldier, and effective at longer ranges, than anything the average soldier can deliver with the pistol—and you can't blame the Army planners for their swing to the longer barreled automatic and semi-automatic weapons.

That doesn't mean that there aren't plenty of men in the Army who are bewailing the loss of "Old Ugly"! Sure, they like the new weapons, for specific purposes. They like the full-automatic blast some of them can deliver. They appreciate the greater range of carbine over pistol. But a lot of the men who are doing the actual fighting in this war miss the heartening companionship of "that lusty Colt, that trusty Colt, that weapon democratic, whose vicious might makes men one height: that Army automatic!" They miss the comforting feel of him against their leg when the going is tough and a "feller needs a friend" that will stick with him.

That's one very nice thing about a pistol: it's *there*. A man plowing through swamp-heavy jungle or getting blasted from one fox-hole to another may lose any weapon he has to carry in his hands; but so long as they don't shoot the pants completely off him, and the belt with 'em, that pistol is still right there in the leather, ready to blast the bejazus out of any thus and so who tries to ram a bayonet into his brisket!

"Give us the pistol *too!*" That's what a lot of them are saying. Read our "Arms Chest": "Army officer wants .45 Colt Automatic for foreign service." "Wanted: heavy calibre handgun, for foreign service."

Ask the boys from Guadalcanal. It's strictly a military secret, but some of those boys over there developed some very deplorable habits! Habits like having sticky fingers when those fingers came in contact with somebody's pistol! Yep. You see, there are still a few handguns in the Army, and in the Marine Corps—and they do tell how it's darned hard for the original owners to keep 'em! The blame things have a way of disappearing! Next time you see 'em, if ever, it's apt to be in the most inexplicable places: tucked under the belt of some guy from "C" Company, for instance—or clenched in a muddy fist, giving a Jap the business!

Yes, the handgun still has friends in the Service; good friends, in all ranks and all branches. He's a grand "last stand" weapon; an in-fighter, handy where bulkier weapons are awkward to carry, a lifesaver in situations where his punch may save a man from two or three (or four or five!) on-coming bayonets. And because he *is* that—and because a lot of men are finding it out and learning to love him for it—he's going to have a lot of new friends (in the Service and from the Service) when this war is over.

Yet the fact is that the pistol is and always was the weapon of the individual; an auxiliary, self-defense weapon; a weapon designed not to make war—but to keep the peace!

As such it is right now getting the shove that should boost it to the biggest boom it has had since the only law west of Chicago was carried in a hip-holster!

Why? Because more "peace officers" are being trained right now—as Plant Guards, as Civilian Defenders, Auxiliary Military Police, Auxiliary Coast Guardsmen, Air Raid Wardens, and so on—than have been trained ever before in our history. The basic weapon used in most of this training is the handgun. And a large percentage of the men so trained are going to carry their interest in handguns over into their post-war "design for living."

Take, for example, one large Ordnance plant at which this writer had the privilege of helping guide approximately a thousand Auxiliary Military Police Guards over the rocky road to handgun marksmanship. These were men from all walks of life, aged from sixteen to sixty. Fully half had never fired a pistol. A good many were hunters, experienced with shotguns and rifles. A very few had had military training with the pistol, and a few others had had some pistol experience (much of it valueless or worse) in the course of previous work as police officers.

But not one of the thousand, so far as I know, had ever toed the firing line in any formal pistol competition.

Results? A grand average for all men of 73.3 per cent over a course that included slow, timed, and rapid fire at fifteen and twenty-five yards at bull's-eyes, rapid double-action fire at silhouettes, rapid fire at running man targets, walk-through combat courses with surprise targets—and, finally, quick-draw point-shooting.

True, we used the Army L target, which is a generous one; true, at least half the course was at fifteen yards. But it is also true that we were using fixed-sight four-and-a-half-inch-barrel revolvers with factory triggers, that we shot in all kinds of wind and weather, and that the average score mentioned above included *all* shooters.

What is more, over that entire thousand-man course of training, not one man required the services of either a mortician or a doctor. There was not a single casualty; not even, to my knowledge, so much as one "accidental" shot fired on the Range.

(Bragging? Sure! You'd brag, too, if you'd helped shape that fine force into safe, well-mannered firing lines of men who can shoot—men who carry themselves a bit straighter, shoulders a bit squarer, *because* they can shoot; because of that subtle, unswaggering self-confidence that comes of bearing arms and knowing that they can use those arms well if the need comes.)

Those men are busy now guarding one of the plants that make the stuff that fills the bombs that Hitler's bad dreams are made of. But they're bitten! Bitten by the bug that carries the handgun virus. Not a few have bought target pistols. More would buy if they could get the guns; will buy, later. It won't surprise me if I meet some of those men some day, at Perry. I'm not sure I'm going to be so happy about that, either! It may be that I'll just stand back and mutter to all and sundry, "Well, I taught 'em! I can't beat 'em, but at least I helped teach 'em; and look at 'em go!"

He's an infighter; a lifesaver whose vicious punch can save men from Jap or Nazi bayonets

When I left that plant there were four pistol teams in that Guard unit, one representing the entire Patrol and one representing each of the three Companies in the Patrol. Chests swelled, in the beginning, when those teams were chosen. But it was a strictly temporary honor. The personnel of those teams changed constantly. A man had to keep shooting to stay on them!

In the first match fired, one of the Company teams beat the team chosen to represent the entire Patrol—the "First Team"; a team composed partly, by the way, of instructors! The four teams placed first, second, third, and fourth in that match, shooting against teams from six other war plants. Next day, a paper in the home town of one of the visiting teams printed an article under the headline, "Local Team Wins Pistol Match"! The article under that headline explained that, while the "local boys" had really placed fifth, it could be said that they had won because they had topped all teams entered *except* the four teams from —— Ordnance, which teams were so far superior in skill and experience that it just wasn't fair to count them in the competition! . . . That, friends, is what I call a testimonial!

That is only one instance out of scores of instances. War plants all over the country are training men to shoot. It seems reasonable to predict that those men, a goodly share of them, will go on shooting after the war is over. It is my guess that handguns will reach, in those post-war years, a popularity the like of which they've never known before—and that handgun competition, for civilians and police, if not for the Army as well, will touch new highs, both in the number of shooters engaged and in the general level of skill attained.

At least, it *can* be true. Our job will be to *make* it so. To teach, and to see that others teach, right principles of handgun use—and to preach the gospel of the handgun to all who will listen! Too long the pistol has been the whipping boy of the firearm family, looked down upon by his longer-barreled relatives, legislated against and damned by the ignorant.

That day is past. Even now the rifle and shotgun shooters are not so condescending to the handgunner. Pistol matches take their place in size and in importance with the rifle and shotgun meetings. Some of the addicts of those weapons are even coming over into the ranks of the handgun shooters. People everywhere are learning to know the pistol; learning to respect it; ceasing to damn it as the tool of gangsters and killers; seeing it again, for the first time since 1900, in its rightful role as a self-defense weapon and a weapon of law enforcement.

That change will gain new momentum as the new thousands of battle-taught and home-guard-taught handgunners swing back into peacetime living. It may even be that their weight, as voters, will tip the scales against insane handgun legislation.

The pistol a dodo? Man, the pistol is just hitting its stride! It's in the backstretch now, pulling up level with the leaders. It will have the inside lane when this war is over—with plenty of backers!

An Editorial

Now We Learn Again

ACCURATE news concerning the war's technical developments is hard to obtain through the screen of censorship. There is, however, one bit of intelligence which is becoming more and more evident in press dispatches and official statements. It is the same development that has become evident in every past war as the contestants have gained experience and the battling has become more intense. It has never been a military secret on the field of battle but it has been a secret as far as many officers are concerned during training camp days. What is it? Just this—the only gun worth having on the field of battle is a gun which is *inherently accurate,* equipped with *sights* that make it possible to hit the target, firing a projectile that will *get results* when the target is hit, and manned by a gunner who recognizes *the correct sight picture* when he sees it.

The gun may be a pistol, rifle or carbine; a machine gun or pom-pom; an artillery piece or a rocket launcher. The "sights" may be simply designed for direct aiming or complicated fire control instruments replete with split images, cross hairs, registration points or spirit levels. The "gun mount" may be flesh and bone, or steel and concrete. The gun may be fired from the ground, from a rolling ship, or from the pulsing frame of an aircraft. The basic requirement remains the same—to kill your enemy, knock out his pill-boxes and bunkers, destroy his guns, sink his ships, or knock his planes out of the sky, you must *hit* him *hard.*

The Marines have recognized this simple axiom in peacetime training as in war. They have recognized, too, the value of small arms instruction as the cheapest way to build accuracy into the gunner by indelibly impressing him with the need for a correct sight picture. They have used the rifle range to hammer into Marines some of that basic *fire discipline* which is another wartime requisite seldom fully appreciated until the shooting starts.

The Navy has recognized the need for accuracy and fire discipline but most naval officers have failed to recognize the basic training possibilities of the rifle range.

The Army has always had its powerful peace-time group which sought "volume of fire" through faster firing weapons, reduction in weight of ammunition so that greater *quantities* could be carried to the guns, and more mechanization of gun mounts. Too often they have overlooked the fact that tanks, tank destroyers, aircraft are not worth the expense, effort and overhead they entail unless they deliver accurate, powerful, *hits* when they get within range of their target. This "throw enough stuff at 'em and you'll knock 'em out" clan, are either converted, or put where their theories can do no more harm when the fighting really gets tough. Comes then the plea from the fighting fronts for greater accuracy, greater penetration, greater demolition effect, *better sight equipment, better gunners.* It has happened in every previous war. It is happening now.

The Air Corps pioneered accurate bombing, then trained its gunners in a scatter-gun technique. Now the Chief of America's sky legions points to the development of the "computing gun sight" as a contribution to victory equal to the development of the computing bomb sight. Note that word *sight!* Air Force gunners as well as bombardiers are at last learning the meaning of "*accurate sight picture.*"

Those officers in all branches who tried to teach their recruits that fixed sights were better than adjustable sights must now be somewhat embarrassed as the adjustable receiver sight makes its appearance on all of our shoulder arms. The drafting board experts who held out for less powerful small arms ammunition so that more could be loaded in each truck must be amazed at the willingness of the Doughboy to carry heavier loads of ammunition if it will only pack the *wallop* needed to kill Japs and Jerries through log bunkers, cocoanut trees and metal car bodies.

The pity is that so many months are always wasted, so many of our best trained fighters lost before we relearn the same lesson that we learned in the same way in the previous war.

Stand to your guns and ideals, you men of the NRA! Basic small arms instruction, correct sight picture, firing line discipline, are still indispensable items in the training of America's fighting men ashore, afloat and aloft.—C. B. L.

Photos by Acme

Our Ordnance maintenance men salvage battle-damaged equipment, repair it, and put it back into the fight. The dangers and difficulties under which these men work are graphically portrayed here by one of their officers.

We Look

By Capt. Chas. S. Schwartz

Wrecked equipment, the enemy's as well as our own, is "cannibalized" for good parts and made over "as good as new" by our Ordnance men.

ge
it,
he
ich
or-
rs.

olf

ARTZ

well as
d parts
s new"
e men.

Courtesy of Time, Inc.

or Trouble–and Get It!

The MP SERGEANT WHO WAS helping me find my tanks seemed to have as little idea where they were as I. We'd been hunting for hours and every one of the missing tanks was still missing. It was a bitterly cold and strangely still night. All we could hear was the movement of columns of vehicles about a mile to our rear and occasional distant rumblings off to the south. The sounds could mean but one thing. We were still in retreat and the enemy wasn't as far away as we'd have liked . . . probably just over the mountains, around Kasserine.

The darkness was so intense that we could see only a few feet; a thin Tunisian moon added to the eerie effect. The cactus shaped up black against the sky and everything seemed to be moving. We were both jittery and to make matters worse I was dead tired. It was close to 3 A. M. and I'd had no sleep for two nights; my eyes burned and I seemed to be walking in a perpetual daze. Instead of lifting the silence, the crying of jackals only served to punctuate the oppressive lack of sound. We were walking between rows of giant cactus. The only thing that told each of us that the other was still there was an almost intangible sense of near-by movement.

Suddenly the sergeant let out a half-strangled yelp and disappeared. I jumped sideways into a clump of cactus and yanked back the bolt of my Tommy-gun. I couldn't see a thing, the jumble of noises and crunching earth seemed almost at my feet. Suddenly the situation came into focus and I was being asked to help an irate, profane sergeant of MP's out of the deepest slit-trench in Tunisia! Why a single isolated trench had been dug in the middle of a cactus patch still puzzles me.

I had brought these particular tanks, twelve mediums, down into the general area during the late afternoon and early evening of the day before. Our outfit had been in Africa approximately three months then.

Shortly after the landing we started the long trek from Oran across Algeria toward Tunisia. I had been attached to the maintenance battalion of the division and had taken over the small arms, instrument-repair, and artillery repair sections. Ours was a service battalion, with the job of repairing or replacing anything that rolled or fought—a big order. We were to fight only in self-defense—an opportunity which was to present itself often enough. The Germans, quick to realize that a repair crew was as important as a supply column, had their air force pay particular attention to units like ours.

Traveling hard, by day at first and then in darkness as we neared the "front", we eventually worked our way into Southwestern Tunisia. Many French troops were in evidence, among them some of the finest appearing soldiers I have ever seen; mountain troops—Alpine.

By mid-February, we were bivouacked about three miles due north of Sbeitla, on the Sbeitla-Sbiba road. The area was directly north of the extensive Roman ruins; and just across the road was a French military hospital. Most of the division was somewhere in the vicinity, all of the train units being within a mile of us. The area itself was a vast, barren, sandy plain wedged in between ranges of high hills on all sides except the north. From the north, we were plagued with a continual, driving wind, day in and day out. There was no vegetation whatever, not even desert grass, and as a result we lived in a perpetual sand storm. We ate and slept in sand; it was in the water and in the gasoline. Carburetors were continually fouled. Maintenance problems mounted. The high winds ripped shelter halves and camouflage nets to shreds. It was impossible to put up the flies for the shops, and a kitchen fly was out of the question.

The wind was really the lesser of the difficulties under which we worked at Sbeitla, however; there was also the enemy. Here, for the first time, we were subjected to direct enemy action. Of course, many of the men had been under fire while away on other duties. When we moved into the area there were already numerous slit-trenches. The place had been used before. One noon, with the men all lined up for chow, a single Messerschmidt 109 came over the hills, out of the sun. No one was paying much attention to it as there had been a large number of P-40's around recently. So we were caught pretty well off guard. It came over fast, let loose one burst from its guns and took off. Miraculously, there were no casualties. The "raid" served to stimulate to an amazing degree the digging of slit-trenches! There was no question about a return visit; we weren't disappointed.

My immediate command was a peculiar one; according to the T.O. (tables of organization) I was in charge of the small arms, artillery, and instrument repair sections. Each of these particular units, however, was under such an extremely competent non-commissioned officer that the attention of an officer was seldom necessary. About all I ever did as "C. O." was to help correlate their activities and act as a "go-between" when any complications arose.

Of particular interest to "riflemen" would be the small arms section. This consisted of two "cab-over-engine" repair shops—each with four men. The entire section, consisting of one technical sergeant in charge and seven other men of various non-commissioned ranks, were especially trained small arms technicians—almost all of them were graduates of the various gunnery schools throughout the country. It was the primary duty of this group to keep all the small arms weapons in the division in operating condition. The job was a big one. Each company within the maintenance battalion had one small arms repair section (as compared to the two in H. Q. Co.). Then each of the combat companies throughout the division had its own company armorer. In general it was the primary duty of the sections in the maintenance battalion to handle "the big picture"; that is—to see that all of the rifles in the Umpteenth Armored Regiment were in workable condition, that all of the machine guns in the Teenth Reconnaissance Battalion were periodically checked. Individual weapons problems were usually well handled by the company armorer.

The "cab-over" was a relatively complete shop. The variety of equipment available made it possible to do almost any reasonable repair work. Within the shop-truck was a fairly large drill-press, a grinder, various sized vises and a multitude of hand-tools. Then, too, it must be remembered that access was always had to any and all of the other mechanical equipment within the unit. The welding truck was always available, the paint truck and the machine-shop truck provided a fairly complete shop—almost anything could be made there, and usually was.

I recall one day down near Gafsa, in late January when someone brought in a .30 caliber M1917 machine gun. A bullet had passed thru the water jacket, neatly clipping off the brass steam-condensing slide-tube within it. The men bringing it in wanted authorization to draw a new gun from the supply platoon. However, a few brass slide-tubes were available in the mass of extra parts carried by the section, so by replacing the tube, and welding a patch over the two bullet holes—the gun was in as good working condition as ever. Of course, it looked a little funny, but that didn't affect its shooting.

The repair sections would undertake almost anything. There was very little that they wouldn't try to repair or to replace. At one time I inherited a relatively new Bren gun from an English armored unit. The weapon was complete except for the extractor. None of us had ever examined the gun in detail before; certainly we'd never paid any particular attention to the extractor. With absolutely nothing other than the shape of the recess into which it fitted and the function it must perform, a workable and entirely satisfactory extractor was made by the machine-shop section.

Another example of the type of repair work undertaken under the stress of battle was a little job that was effected by the artillery repair section of "C" Company. This happened early in January when "C" was working independently of the remainder of the battalion. They were well up into the mountains in the neighborhood of Maktar, in Tunisia. Vicious fighting was going on just a little east of there in the Fondouk pass—and "C" Company was spending about half its time in slit-trenches. One of the 105 mm. howitzers of one of the divisional artillery battalions was hit by a partially spent shell. There was no penetration, but the tube was sufficiently dented to force a protrusion into the barrel. It was obvious that it would be impossible to fire the gun with a barrel like that. However, they needed every gun they could get, just then, and there were no tube replacements this side of the base-depots, hundreds of miles rearward.

The howitzer was brought to the artillery repair section, but how could it be repaired? There are no tools available in a field ordnance unit to straighten out bent gun barrels! In desperation the section leader took the gun out of the immediate area, pointed it toward the enemy, loaded it with an armor piercing shell and every bit of charge she'd take—and fired it! The recoil was terrific, and the tube nearly tore itself loose from the cradle—but it worked. The shot "ironed" out the barrel and the gun was in working condition again.

It was the duty of the repair sections to stock a reasonable quantity of replacement parts. This was no easy job. Of course, a so-called "basic load" was provided, but it was seldom applicable and it was very easy to run out, usually at a crucial moment, of those parts necessary to keep a particular group of weapons in action. The repair sections stocked all of the working parts of a small arms weapon, and all of the non-working parts with the exception of the numbered receivers. A man could bring in a totally wrecked Thompson submachine gun, but if the receiver was intact everything else could be replaced and he would receive what amounted to a new gun.

At intervals the repair sections would prepare for "inspection." At this time all the men of a particular organization would come to the section with their weapons. A regular production line affair was set up; the men passed a series of tables at each one of which his particular weapon was examined. If it needed attention he stepped out of line and waited. Then the necessary repairs were made.

The artillery repair section had, in addition to its two "cab-overs", two ¾ ton "pick-ups". These were the "touring" artillery repair units. It was their job to go "to the guns" when such was necessary.

The instrument repair section was the smallest of the three; but it was a most interesting one. It consisted of only one vehicle—a "cab-over" shop like the others—and the crew consisted of four technicians, including the section-leader, a sergeant. It was the job of this group to repair the instruments of the division. This included everything from artillery aiming circles and battery commander's scopes, to field glasses and pocket compasses. There is very little that can't somehow be classified as "instrumental." Actually, the shop was a miniature laboratory. There was a miniature jeweler's lathe, grinders, planing tables, levels, presses, etc. The shop possessed everything necessary to check, adjust, disassemble and assemble, and clean almost any existent instrument. The greatest part of their work consisted of field glass adjustment and cleaning. Two of the men ran a thriving business of watch repairing. Field soldiering is most difficult on any precision instrument, and the omnipresent sand made watch repairing very necessary.

It might be interesting to note here some of the conditions under which a field repair shop actually works. For instance, the small arms repair groups worked almost entirely within their shops. The interior is sufficiently large for four men to work with comfort—but there are disadvantages galore. For one thing, if the door is closed and any of the machinery is in operation, or even with the door open, it is often impossible to hear enemy aircraft. The first warning, ordinarily, that a soldier has of an impending air attack is the sound of the engines. Within the shop that isn't possible. Time and time again shop personnel was caught diligently at work within while outside everyone was madly dashing for cover. The first suggestion the man inside may have of the attack might be the CRRRRRRRUMP! of the bombs—or the smashing of the bullets thru the vehicle. Or he may happen to glance out the window and see the abnormal activity. Then too, one can't always get out of a shop truck in a hurry. The interior is cluttered with permanently fastened machinery. To make matters still worse, the Germans always made a practice of shooting up repair shops. They were much better bait than an amored vehicle or an ordinary truck.

The "shop-soldier" doesn't have an easy time of it. Under ordinary circumstances he has nothing other than his rifle or pistol with which to fight off aircraft—his most common enemy. No shop-vehicle mounts a weapon—although we did have some improvised mounts on the bumpers of some of the stock-trucks (vehicles accompanying the shops). The repair soldier lives the same life in the field as does any other man who isn't, at the moment, engaged in actual combat. He sleeps on the ground—or under it—in the same sleeping equipment as does any other member of an armored organization. But he does have some advantages. For one thing, while on the march he stays relatively dry. Also, it's possible for him to carry more personal equipment than can a soldier in a fighting unit. There's always room for another pair of coveralls, or an extra frying pan on a vehicle. As a result, his life is a little less unpleasant.

The shop technician does all the duties of any other soldier in the organization. He pulls his "K. P." and guard tours just as regularly and has just as much equipment to care for, more in fact. In addition to his personal equipment (the only concern of the foot soldier) he has his vehicle and all of the tools and instruments therein. Never let anyone tell you that a field-shop technician doesn't have a full time job.

Improvisation is always the order of the day in any repair outfit. A wrecker crew in our company stumbled on a water-cooled caliber .50 machine gun. These were rare gems in those days—later they were issued to us. It turned out that although this particular gun was more or less intact (sans sights), the mount had been cut to pieces. In no way daunted, the machine shop made a U-bracket and bolted this to the crane on the back of the wrecker. The .50 was then mounted on this bracket, using an armor-bolt. There was no circulating system, but by filling the jacket with water they had a gun that could pump them out faster and longer than could our regular air-cooled guns. I don't ever recall an air attack when one of that wrecker crew wasn't up on the crane working that water-cooled job. They were immensely proud of it. Gun mounts were made of almost everything. Common pipe was sometimes braced and bolted to bumpers and fenders of trucks in order to provide a temporary, usable anti-aircraft mount.

There had been three JU 88's shot down in our immediate area down near Sbeitla. Their wreckage was strewn all over, and included in it was an almost intact set of landing struts. They were made of Duralumin, and the lower portion was so designed that it could be very easily made into a usable anti-aircraft mount. The strut was turned upside down and driven into the ground. Then to the protruding bracket was bolted a yoke to which, in turn, would be bolted a caliber .50 (or .30) machine gun which had been removed from its more or less useless mount on a vehicle. The result was that the gun was firmly fastened to a form of cradle which was capable of rotating 360 degrees. It provided, a full field of fire under any circumstances, which few vehicular mounts do. I have seen the damaged barrel of a 37 mm. cannon, removed from the wreckage of a shot-down P-39, used in the same manner—and then later machined into an axle.

Probably the most colorful of all maintenance activities in the field is recovery work. This type of duty is almost entirely the job of the wrecker crews; it is they who go out and bring in the vehicles, that are to be repaired. Sometimes the maintenance personnel goes to the job but not very often, because in most cases the organizational maintenance man is as competent to do the job as is the repairman from the maintenance battalion. The essential difference is not so much in the individual, but in the equipment at his disposal. In the event that he does not have this equipment—the job must go to the battalion; not to the men, but to the equipment. Therefore, other than recovery personnel, the technical men of the maintenance battalion seldom leave the battalion area. An exception to this would be the technicians of the instrument repair section, as there are no instrument repairmen in the division other than in the maintenance battalion. So, for the most part, the equipment comes to the man.

The wrecker crews are "jacks of all trades"— in addition to being expert at their craft, they must be highly imaginative—because no two jobs are alike. Also, wrecking is probably the most dangerous job in a maintenance outfit. For one thing, the wrecker crew is on the road more than anyone else—and it is on the road that the greatest danger exists. The first casualties in our battalion were wrecker men who were caught on a road during an air attack. The enemy always goes for the wreckers first. For one thing they're very easy to distinguish, with their long boom above, and if they're towing a vehicle they must be moving slowly. Secondly, their only armament is a single caliber .50 machine gun mounted in back.

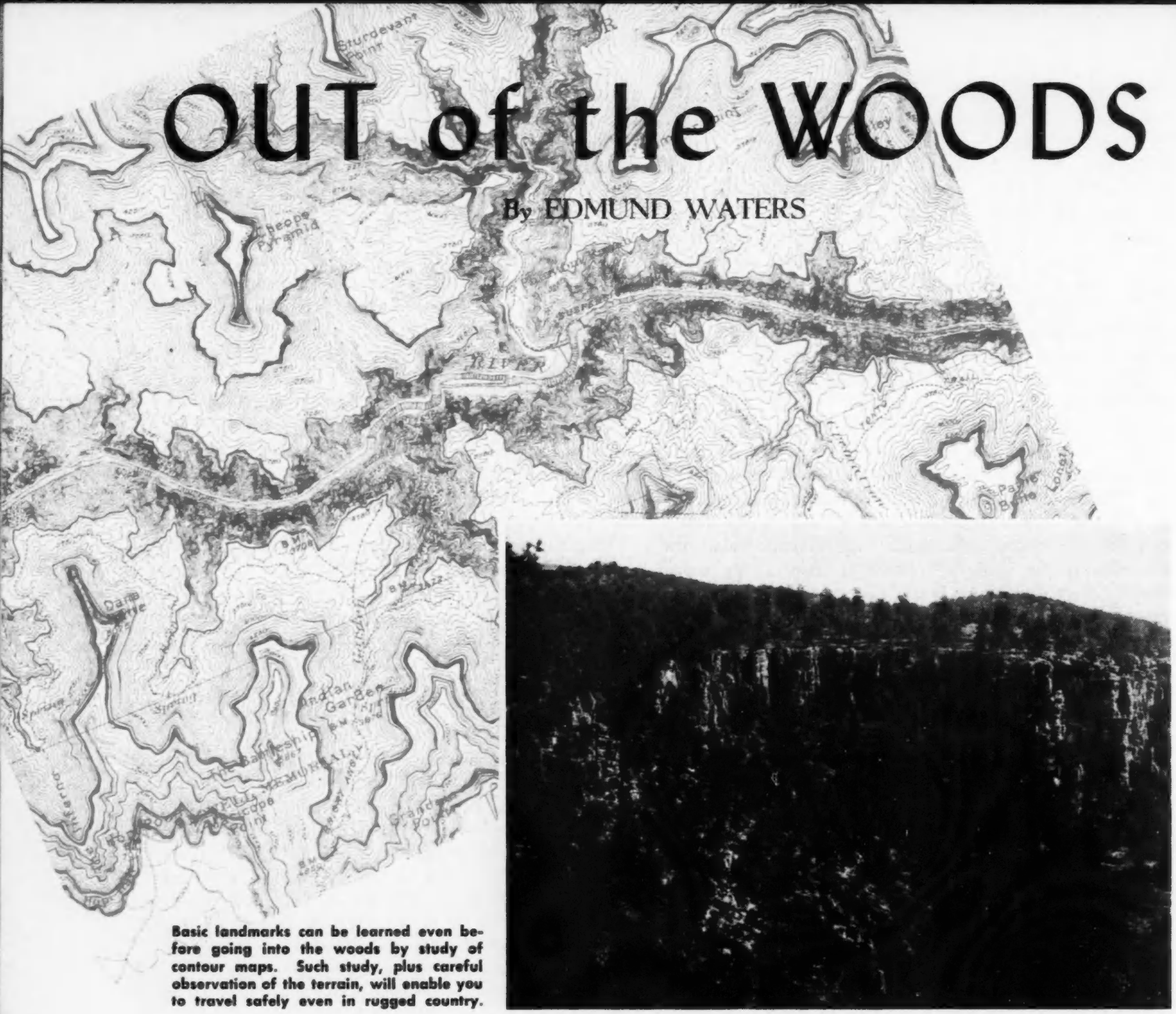
Then, too, of all maintenance personnel, the wrecker crew is most exposed to enemy mine action. He is usually among the first to arrive at a piece of equipment and consequently, if the piece is mined, he'll get it. For the most part, he's away from the battalion area the greater part of the time; his job is to bring things to the battalion. A wrecker crew ordinarily consists of just two men as you can almost always depend on getting help locally.

The wrecker works in close support with the combat units. It is he who must go up during the hours of darkness and attempt to bring in disabled tanks, damaged half-tracks or what-have-you. In the zone of battle he must work practically always at night, and he's extremely vulnerable. During our sudden exodus from bivouac near

(*Continued on page* 31)

OUT of the WOODS

By EDMUND WATERS



Basic landmarks can be learned even before going into the woods by study of contour maps. Such study, plus careful observation of the terrain, will enable you to travel safely even in rugged country.

THE SUN SANK BEHIND THE HILLS with all its usual splendor, but this time—something was wrong. Somewhere out in those hills were two hunters who should have been back at the ranch. Either some accident had happened or they were lost, and I personally was sure it was the latter.

In spite of myself, I couldn't quite repress an "I told you so" feeling. I had warned them. But they would learn, the hard way, because there was nothing that could be done now. Trying to signal them would merely encourage them to try to travel in the dark. I turned in, knowing that I'd need rest for the morrow.

Those two had come out to my ranch for their autumn deer hunt. They had planned to hunt two ridges slanting back into a range of hills to the east, pacing each other so that if one jumped a deer the other might get a shot. I had suggested that they spend their first day making short trips to the higher hills, studying the heavy timber and establishing landmarks. But they were impatient, scornful of such waste of time. And now they were lost!

Next morning I took my rifle and slipped into the woods. After a walk of about three miles, I fired three shots and promptly got their answer. Soon thereafter I was able to gather up the strays and head them for home.

"Where did you camp last night?" I asked.

"Camp! We didn't camp. We tried all night to get out of that jungle."

"Did you expect to have better luck getting out after dark than you did during daylight?" I snorted. But I didn't press the point. The kids were exhausted and visibly shaken by their experience. And they had learned a lesson in woodsmanship.

Every year the papers are full of accounts of lost hunters; hunters who went into the woods without experience and without any preparation or any precautions. They plunge into strange wilderness with no knowledge of the terrain or the slightest understanding of how to get back to their starting point.

Preparation for any big game hunt, or for that matter any penetration of wild country, should include a careful study of the country beforehand. It should include at least the basic principles of what the army calls "terrain appreciation" and what I call woodsmanship.

I recall being lost myself a few years ago on ground with which I was thoroughly familiar. My two partners on this trip did not know this country so the lot of guide fell to me. This was rough country, mountainous, heavily wooded, criss-crossed by canyons. I knew every hill, every ridge, every stream—when I could see them; but on this particular day, as it turned out, they were hard to see!

About five miles out of camp we decided to call it a day. Because the trail back was a rough one through heavy timber, we rested for a few minutes before hi-tailing it back and while so doing I noticed that the light was changing. To the west we could see a heavy fog rolling across the hills from the coast. It was coming fast and had already blanketed the hills between us and our camp. As we headed back the fog blotted out everything. We couldn't see forty feet in any direction.

Our troubles began soon. We picked our way along the first ridge, made the first landmark, dropped over the ridge and crossed the draw. To reach camp we had to swing up on the next ridge, follow it for a short way and then follow another ridge toward the west. Somehow I missed the boat. A large fir windfall that should have been lying across the ridge didn't materialize. I knew our location—within a half mile—yet I was lost.

There were three alternatives open to us—we could take a compass course toward camp; we could follow the westward flow of the creeks, or we could make camp for the night. A compass course wasn't feasible because of the rugged nature of the country. There were steep canyons and sheer jungle-covered cliffs to be negotiated. Following the westward flow of the waters through the brush-filled ravines offered little attraction; so we camped. Next day we were able to return to our base without difficulty.

Experiences like these will convince the most skeptical that losing contact with established landmarks in the woods is disastrous.

Landmarks are of two types. Basic landmarks establish the hunting range with reference to the camp. Detailed landmarks establish the trail in the hunter's mind.

The basic landmarks of any range can be learned before going into the woods. They can be studied in your own living room from the maps of the U. S. Geological Survey. These maps are available from the Survey in Washington for about ten cents each. (Right now there are certain war-time restrictions on the distribution of such maps and it will be best to contact the U. S. Geological Survey regarding the availability of maps for any particular area.)

Two cuts of such maps are shown herewith. It is amazing how much information is contained in a map of this nature. From it can be drawn an exact picture of any part of the territory it is planned to hunt. (See contour illustration taken directly from map on page sixteen.) Simply draw horizontal lines, equally spaced, on blank paper, labeling the lines to correspond with the contour levels on the map; bottom line, lowest level, etc. Project verticals from points on map to corresponding contour line on paper, and connect the points so established. The more points, the more detail.

Learn first to read such a map. Then learn how to use a compass. (And don't be dissuaded by the would-be experts and scoffers.) Then study the map of the country to be hunted. The major points to be noted are the general nature of the country, the drift or trend of the major ranges of hills and ridges, the elevations and the watershed. Study the streams and the direction of flow of those in the area in which it is proposed to operate.

With this information clearly in mind a fine start has been made in knowing the country before you have even left the safety and comfort of your fireside.

The details of the country will have to be studied on the ground itself. Photographs help, particularly in military operations, but these are not always available to the average hunter in sufficient detail and number. So the actual detailed landmarks will have to be observed on the spot. Study the country, compare it with the map.

In studying the range all unusual features should be spotted and, preferably, noted in a field map or a notebook. Unusual characteristics of individual trees standing out alone on the landscape, peculiar shapes of hills or ridges, rocks or what not. Don't trust too much to memory. Make field notes as you go along. Establish as many detail landmarks as possible. You probably won't remember them all and the more there are the better insurance there will be of some of them bringing you home.

Watch the water drainage. In any one watershed the creeks and rivers all tend to flow toward a certain general spot which can be readily established with reference to camp by a perusal of the map. Stream flow is one of the primary landmarks of the experienced hunter.

Once I hunted in territory quite unfamiliar to me. Camp was located a half mile from the main creek and we had an excellent view of the country. Eastward for several miles the ridges ran back toward a higher range of mountains. Innumerable small streams fell away toward the west to feed the larger stream on which we were located. Directly below camp and almost on the main stream was a large bleached snag. As a landmark, it was a natural. Each evening I returned through the woods

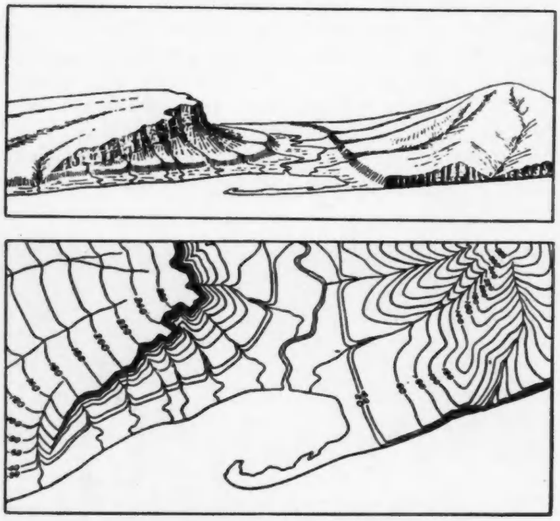
Pick landmarks like these whitened snags, visible from afar, recognizable, not frequently duplicated.

without the slightest difficulty. From the east it was only a matter of following the flow of water until I came to the bleached snag on the main stream where I turned up the ridge to camp. Hunting west of camp, I followed the flow until I came to the main stream, then turned up the larger stream until I raised my landmark.

The trained woodsman has developed over the years a woodcraft that is automatic. He doesn't think a great deal about it. Pin him down and he would be at a loss to account for his skill. He may speak vaguely of "instinct." Actually, it is a matter of observation and memory performed almost subconsciously.

If when you are lost there were some way of picking you up and placing you at your starting point, you would probably have little trouble in retracing your steps to where you were lost; because, in that direction, the trail is familiar to you. It comes into your vision in the same manner as when you first travelled it. You remember it.

It is the back trail that is difficult. As you face about you look at the woods from an entirely new viewpoint. Watch your back trail as you go, and you will have little trouble in retracing your steps. The forest won't be strange because you will have seen it before as you see it now. This takes training and, at first, conscious effort. A compass and a field notebook can be a great help. In time neither will be needed.



You can't be lost if you have a picture of the terrain in your mind or in your pocket. Map=picture.

Suppose, however, that you are lost. Assuming the worst, you are without a compass and have established no landmarks. When you realize you are lost your watch tells you it is about one o'clock in the afternoon. You know that you are generally north of camp. From one to four you try vainly to find your way out but succeed only in becoming more and more bewildered.

The one important thing to do is to "keep your shirt on." Above all things don't get excited or panicky. You can't think intelligently in that condition and it is wholly demoralizing. Figure it out. There's a long night ahead of you and there seems little chance of your getting to camp before it closes in. The sensible thing to do is to make camp. Spend the remaining hours of daylight in making that camp comfortable. Select a sheltered spot and gather a lot of dry firewood. There's good company in a fire. Be sure you have plenty of fuel for it.

Courtesy—The Infantry Journal

If the night is clear, the North Star is a beacon.

Make up a comfortable bed. If you have a sandwich left over from lunch, eat it. Eat in all; tomorrow will take care of itself. Get a good night's rest and in the morning take your problem to the mat. You know that you are north of camp, that you are, of course, less than a day's march from that camp. Things aren't really so bad.

After your breakfast (it's up to you to get it) try to decide which way is south. The sun always rises in the east in this country. That's a beginning. Mebbe you have already established your direction by the North Star during the night. But it's good to double-check on the signs. When the sun is in the heavens you can always use your watch as a compass. Hold it flat with the hour hand pointing toward the sun. Halfway on the smaller arc between the hour hand and twelve o'clock will be south.

Moss on trees offers another means of finding direction in the woods. Tradition says moss always grows on the north side, but don't let this confuse you. Moss grows on the moist side of trees, the side which stays wet longest. A leaning tree is quite apt to have the moss on the upper side regardless of compass direction. To check direction from the moss on the trees select straight trees apart from the others. Choose trees having rather smooth bark and located on level ground. Don't rely on one such tree but check several and take the average.

Don't waste ammunition firing your rifle to attract help. You may need it to shoot game for food. The hunters from the camp will be doing everything in their power to find you and until you hear them signalling there is little to be gained by using up your ammunition.

Go prepared. Carry a compass and a map and know how to use them. Carry plenty of matches in a waterproof case. Take along two days' rations in the form of bar chocolate, tea and dried fruit. Extra ammunition should be carried if the territory is not entirely familiar to you. These items, along with a stout knife, a tin cup and a spoon, can be carried in a tiny bundle in the pocket of your hunting coat. They will hardly be noticeable and if you become lost they will be worth their weight in gold.

Cram on woodcraft. Don't despise book l'arnin' but back it up with thorough field study. There are some excellent books on this subject which make fine bases for field observation.

But remember, when you realize you're really lost, take it easy. Take a tip from the Indian who on being asked if he were lost, replied, "Me no lost. Me right here. Wigwam, him lost. If me no find him, me build another."

How Far Is Far?

By BILL McCANDLASS

FLOCK AFTER FLOCK OF DUCKS tried, that morning, to come in to my decoys. I'd see them check and swing, circle and let down, getting ready to set their wings for that joyful slant downward—

And then—then, from behind an adjacent levee, a blankety-blank, fiddle-brained hunting-license-holder (I *won't* call him a hunter!) would rise up and pump three shots skyward. My ducks would high-tail, throttles wide open, leaving the benighted thus-and-so back of the adjacent levee with a puzzled and mournful expression on his ugly pan—and leaving me duckless, venting a flow of language fit to wilt the tules and set the water steaming!

Time after time it happened until I had to do something or explode. I knew it was hopeless, but I tried. I begged the man in the name of whatever gods he worshiped to let the birds come in. If he'd do that, I told him, we would both get ducks. As it was, neither of us had as yet cut a feather—and neither of us ever would, with him shooting at those ranges!

You can guess what he told me. He told me he had as much right to hunt there as I did and if I didn't like it I could move on somewhere else!

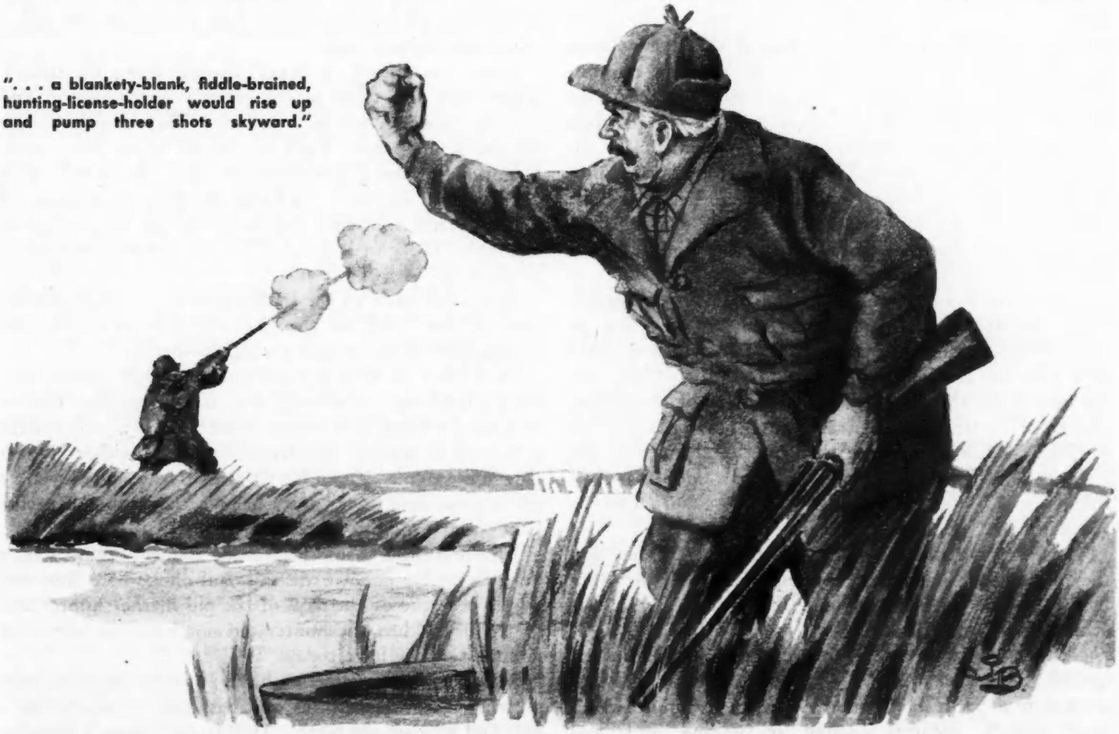
Which was true . . . and I didn't . . . so I did! I left him still blazing away at ducks forty rods high. The very least I wished for him was that he'd shoot away all his ammunition and never be able to buy more!

Every duck hunter has, at one time or another, run into such shooters. They are the curse of the marshes. May their tribe decease! They spoil the shooting for everyone else and—because they do occasionally get a few spent shot into a duck—they waste twenty birds for every one they bag because the duck so hit keeps with the flight perhaps for miles, then weakens, falls, dies and becomes meat for some varmint.

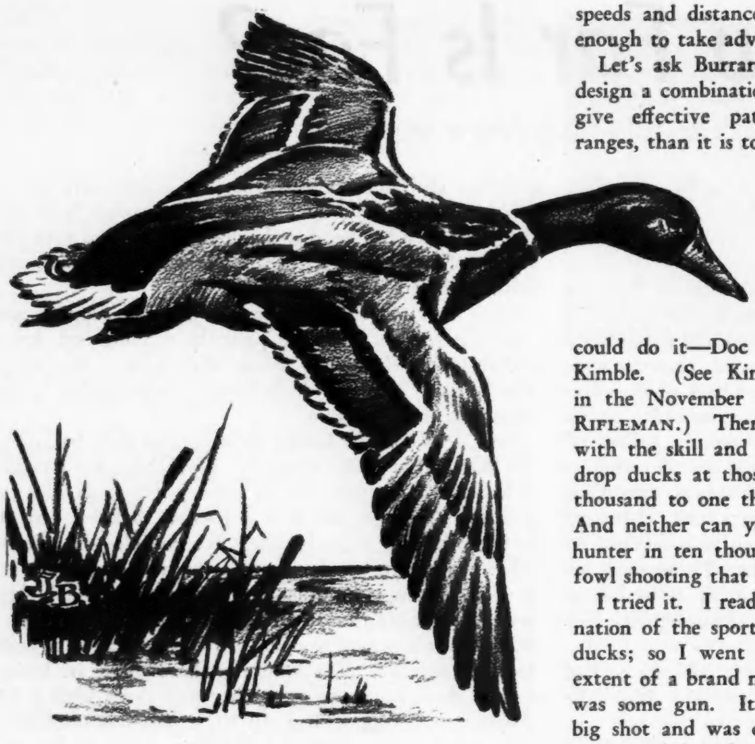
How to cure 'em? I dunno! Some, I suppose, are incurable and for them I'd prescribe running 'em down and wrapping their guns around their necks! But there may be some who just don't know better—and it is for them that this is written.

First, let's consider briefly the matter of sheer ballistics. We hunt ducks with a shotgun. Now, it's quite possible to knock a duck stone dead at seventy-five yards with an ordinary 12 gauge, just as it is possible to kill a deer at half a mile with a .30-30 rifle. It's possible—*IF* a stray pellet happens to hit the duck in the neck and break it, or if it hits in some other easily vulnerable and highly mortal spot, or *IF* the .30-30 slug does likewise to the deer. *BUT*—the chances of so doing are so remote as to be next door to fantastic. The hunter with an ounce of brains doesn't shoot at ducks at seventy-five yards with a 12 gauge, nor at deer with a .30-30 at half-mile ranges.

In other words, practical shooting range is limited, first, by the capabilities of the gun itself; and seventy-five yard birds simply are not within the practical killing range of the ordinary shotgun. If there is any doubt on that score, hark to the wisdom of a real shotgun authority, Major Gerald Burrard, in his three-volume treatise, "The Modern Shotgun": "At fifty yards, the pattern given by



". . . a blankety-blank, fiddle-brained, hunting-license-holder would rise up and pump three shots skyward."



the great majority of guns is so open . . . that there are comparatively few pellets in the thirty-inch (patterning) circle. . . . At sixty yards, this difficulty is present even with the very fullest choke"!

Remember, too, that Burrard is speaking here about *patterns*. Patterns tell only a small part of the story of shotgun ballistics as they apply to wing shooting. A pattern (if it's big enough!) catches *all* of the shot-charge: the pellets at the front end of the shot-column and the pellets at the belated rear of the shot-column. A bird on the wing doesn't. He gets only the pellets his body will intercept in the split fraction of a second while he crosses that shot-column. Now, experiments at du Pont's testing laboratories prove that the shot-column from a shotgun lengthens with distance; that it will be from one foot to a foot and a half long for each ten feet of range—and that 90 per cent of the shot will be in the first one-third of the shot-column.

You needn't understand a lot of ballistics to gather from the above that hitting a high-tailing duck at seventy-five yards—with the odds at least two to one that he'll cut the trailing two-thirds of your shot-column; the two-thirds that contains only one-third of the pellets, and those scattered to hell and yonder—is not a good gamble! When you divide that by the chances of the stray pellet that does hit him, hitting a spot that will fold him—! Well, what odds will you take? Only a gambling fool would take a chance like that.

Those are merely ballistics and, conclusive as they are, they're not even important in comparison with the other factor in this question of long range shooting. That other factor is the shooter.

Granted that there are (or were) guns on the market, special jobs, that will kill ducks pretty regularly at seventy-five yards or further: how many hunters are good enough, accurate enough at judging leads and speeds and distances and angles, to point the gun well enough to take advantage of those ranges?

Let's ask Burrard. Burrard says, "It is far easier to design a combination of special gun and load which will give effective pattern and penetration . . . at long ranges, than it is to find a human being who can use this combination with success on individual flying birds!"

Such human beings, friend, are mighty few! I found out a long time ago that I'm not among them and I've killed my share of ducks, too. Some of the old wildfowlers could do it—Doc Carver, Captain Bogardus and Fred Kimble. (See Kimble's article, "My Shooting Days", in the November and December, 1936, issues of THE RIFLEMAN.) There are a few today who can do it, men with the skill and the experience to lead and swing and drop ducks at those ranges. But the odds are easily a thousand to one that *you* can't do it—or you, or you. And neither can your Uncle Homer! Because not one hunter in ten thousand today gets the volume of wildfowl shooting that he would need to learn it.

I tried it. I read an article somewhere about the fascination of the sport of pass shooting at high, fast-flying ducks; so I went out and dented the bankroll to the extent of a brand new Super 10 gauge Ithaca double. It was some gun. It shot one and five-eighths ounces of big shot and was definitely the shootin'est scattergun I ever tangled with, providing you could point it right.

There was the sticker. I couldn't. Oh, I killed quite a few ducks with it at long range; killed 'em dead with plenty of shot in them. Those birds were not scratched down; they were killed dead and killed sudden! In those cases, I had guessed right and caught them in the center of the pattern. Trouble was, I didn't guess right often! Strangely enough, the thing that caused me to go back to the type of shooting I knew best was a shot that killed a big canvas-back hen.

There was a flock of "cans" coming down the slough. They were out there all of seventy yards, flying full throttle, heading out for the bay. They were in single file and leading them was a regular old buster of a drake. I aimed for the drake—led him half the width of a county—and cut loose. I killed the fifth duck back. I said to myself right then and there, "Mister, you ain't good enough! The gun is a lulu, but you ain't man enough to shoot it!"

So I went back to the little LeFevre 16 gauge double, over decoys; back to the old tried-and-true policy of letting them come in to forty yards—or less.

How do I know it is forty yards? Well, when I can see the markings on a duck, clear and sharp, then I know he's not far from forty yards distant. It is a good system —because it works! At that distance you either hit 'em or you miss 'em. If you hit them half-way square, you've got a good dead duck, not a cripple that will fall in the next county and be wasted.

This brings me to another fallacy about shotguns which deserves to be punctured: this full-choke-bore business, which is a relic of the days of the old market hunter and of the days when the hunter did not have the improved ammunition we have today.

Now I have no quarrel with the guy who boasts proudly of what a tight choke his gun has, how it shoots like a rifle and all that old bunk. He's happy, though deluded.

But I can tell him this, he'd get a lot more game if he had less choke! Because, as shown above, the odds are very high indeed that he is not a good enough shot to utilize the capabilities of a full-choked gun.

I remember when I bought the little 16 gauge. I thought it over for quite a while before I ordered that gun. I asked for two sets of barrels, one set bored quarter choke in both barrels, the other set bored three-quarter choke in both barrels. I ordered a single trigger, non-selective and a beaver-tailed forearm. Then I ran like hell, lest the scandalized dealer argue me into changing to full-choke. By the time I got home I'd gnawed my fingernails to the quick, figuring I'd made a fool play. You see, I was still haunted by that old fallacy that a gun had to be full-choke to reach out and knock 'em.

Well, the gun arrived, happily, the day before the pheasant and quail seasons opened. I fell in love with the little rascal at first sight, but I wondered, "Will it, or won't it?" I made up my mind I'd find out the next morning. I went whole hog. I put on the quarter-choke barrels, slipped in a couple of loads of sixes, called the setter, and set out. I wasn't 200 yards from the house when the dog worked into a patch of thistles and went into a beautiful point. I took a deep breath, slipped off the safety and went up. Out of those thistles with a rush and a roar and a cackle went a big cock pheasant. I cut loose and mister rooster folded like an empty sack.

Half an hour later, along a little ditch full of berry vines, I got into a covey of quail. I loaded up with sevens-and-a-half and went to work. Man, it was heaven! I found I was shooting the sweetest little quail gun I ever had my hands on. To top it off, while the pooch was still working quail on the far side of the ditch, I nearly stepped on another big pheasant rooster. He scared the daylights out of me getting up, but I went after him with that little gun, with its open boring and those same seven-and-a-half size shot—and he came down just as dead as had the first one.

That gave me my answer! Right now, there isn't enough money minted to buy that little gun if I couldn't get another just like it. Other scatterguns stand in the gun case, but the little 16 gauge goes with me. I use it on ducks with the three-quarter choke barrels and it is deadly enough to have earned a nickname from my duck-hunting pals. "Little Poison" is what they call it.

The point is this. You can't do a lick of good on 'em when they are way up there, no matter what kind of gun you use. The full choke is, or was, the tool of the old-time market hunter who did more shooting in one year than the average hunter will do in five lifetimes. He shot the full-choke so much that he became expert and could really utilize it. The average hunter of today is deliberately handicapping himself by using a full-choke boring. With a 50 per cent choke, the average man will bag more birds than he ever imagined possible—*providing* he lets those ducks come down to within decent range.

Now, don't go hog-wild, in case you should decide to take my advice and open up the old gun. Don't saw the barrel off! If you do that, you'll have nothing but a club and, for a club, a pick handle is without peer! Unless, of course, after sawing the barrel you put on a Cutts Compensator or a Poly-choke; either of which is "the cat's" for the guy with a single-barreled gun.

I know it is hard when you see an old bull sprig or greenhead coming in with set wings, to wait for him. When you first see him, maybe he's 200 yards away and as big as a mosquito. By the time he is in to eighty yards, he looks a lot bigger! He'll get bigger fast as that eighty yards is cut to sixty, and to fifty. If you can't wait, you rise up, the duck sees you. He flares—and that fifty yards has become sixty, maybe seventy, before you can get on him and pull. So you don't get a feather, and you vow the gun ain't worth a whoop and that the next one you buy will be super-super full-choke! Which is just piling one delusion on top of another!

It all boils down to the question: "How far is far?"

The answer is, any distance at which you scratch ducks down instead of folding them up *is too far!* You're wasting ammunition, and you're wasting ducks. And you are being cursed until your hide should crinkle by every sane hunter on the marsh!

Right about now some guy is going to jump up and squawk that he takes them away out there because it is more sporting! My answer to that is, "Hogwash!"

The poorest sportsman in the world is the man who persists in shooting at ducks, or at any game, winged or legged, at distances too great for sure killing.

Maybe as I grow older I get a trifle sentimental. But to me deer hunting isn't just killing. It's the start before dawn, in that mystic half light, when the air is still sweet from the breath of night. It's the smell of pine and of sage and mists in the canyons. It's the gold of the sunrise along the crest of far ridges.

And duck hunting! Why, it's the lonely marsh, the autumn coloring of the sedge and rice grass and tules. It's the smell of the mud flats, the soft lapping of the water against the skiff. It's shore birds wheeling by. It's soft rain, and white frost, and crisp cold sunshine. It's wind and storm and sun and wild wings curving gracefully against the sky—and the far-off quack of a restless mallard or the clarion call of a Canadian goose winging high. It's dawn and sunset.

Oh, yes, I love the smell of smokeless powder just as well as the next guy. It rounds out the day to take home six or eight ducks. But the day is all the more satisfying if the memory of those six or eight kills is of birds folded cleanly in the air, killed as any real sportsman likes to kill—quickly, mercifully, without the regret of a lot of cripples. To do that kind of shooting, the first thing you have to learn is: how far is far?

Put a little study into it. Don't blaze away blindly at every bird regardless of distance. Let 'em come in.

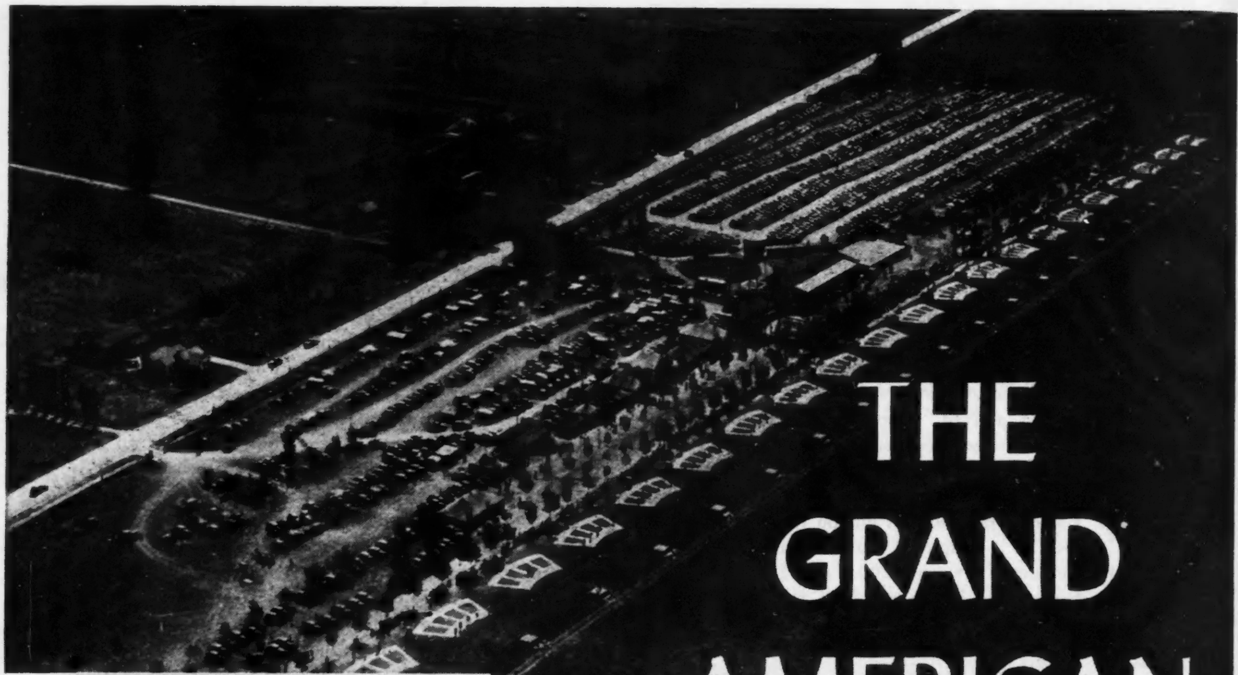
One of the best days I ever had on the marsh was a day in which, during the first flurry of the flighting, I picked up three or four birds. From then on, for some reason, the birds would work in only so far, always cutting away just before they got in range. Whether for some obscure reason they were nervous and on edge, or whether there was something wrong with my decoy setup, or whether I didn't have the skiff and myself well enough hidden, I don't know. I was too lazy and too much at ease to care! I stayed out all day and had a whale of a time, just watching them blaze down out of the sky and start to work. The fact that they kept out of range didn't worry me.

A friend I met on the way home said, "Out all day and only four ducks? The hunting must've been lousy."

I said, "The hunting was grand!"

He looked at me as though he thought I was crazy.

Well, maybe I am. But I still claim it was a swell day.



THE GRAND AMERICAN

Scene of the Grand American, forty-four-year-old clay target classic.

By FRITZ HOWELL

FOR TWENTY YEARS the Grand American, top trapshoot of the nation, has been held at Vandalia, Ohio, home of the Amateur Trapshooting Association. For twenty-four years prior to that, the Grand American was a national event, shifted from city to city. Wherever held, the Grand American has been, through all those years, the "last word" for the shotgun shooter, just as Camp Perry is the "last word" for the rifle and pistol addicts.

This year, in spite of ammunition shortages, travel restrictions and gasoline rationing, more than 900 shooters poured into Vandalia, August 25th, 26th, and 27th, for the Forty-Fourth Annual Grand

Left: Jasper Rogers, Dayton, Ohio, winner of Grand American Handicap.
Below: In normal years, a million shells; nearly forty tons of shot!

American—to fight it out over the abbreviated 500-target route for the championships of the clay-bird sport.

Although run for the first time on a "bring your own shells" basis, although cut from eight to three days, and from 1900 to 500 targets, the "Roaring Grand" still drew scattergun enthusiasts from every state in the Union, from most of the Canadian Provinces, from Cuba, and from the Canal Zone. Hoosier "hot-shots" practically stole the show, winning nine of the twenty-three titles; but the Number One prize, the Grand American Handicap, was won by Jasper Rogers, an Ohioan.

As usual, the Grand American titles went mostly to "unknowns". Rudy Etchen, twenty-year-old sailor shooting instructor at Navy Pier, Chicago, was the only "seeded" star to win. Using the same gun with which his father won the same event in 1938, Etchen broke 96 x 100 to retain the doubles championship.

Top feminine laurels went to "Skipper" Winski, seventeen-year-old Wellsburg, West Virginia, high school girl, who won both the Preliminary and Grand American Handicaps, the first woman ever to win both titles in the same year.

Others to capture the coveted crowns included a toolmaker, a seventy-year-old man, a fourteen-year-old boy, a farmer, a garage mechanic, an Army Sergeant, a woman bookkeeper, and a sixty-four-year-old Texan who has been a professional shooter for thirty-seven years.

As compared to championship meetings in other sports, the Grand American is unique in that only amateurs can win money prizes, whereas the professionals shoot for trophies. Some idea of the size of the event can be gained from the fact that, in addition to the large entry list, spectator crowds of more than 10,000 have witnessed the shootoffs for the main events on numerous occasions.

The Grand American Handicap, in which the shooters are placed from sixteen to twenty-five yards back of the traps according to their known abilities, is probably the least predictable event in any sport. It has been won by novices many times, but no shooter has ever come close to winning the title twice. No woman has ever won it, although Mrs. Lela Hall, of Strasburg, Missouri, five times winner of the Women's Sixteen Yard Championship, has come close several times. Only three shooters in the entire history of the event have scored "possibles" of 100 hits: R. Thompson, of Gainesville, Missouri, in 1910; seventy-year-old Charles A. (Sparrow) Young, of Springfield, Ohio, in 1927; and F. G. Carroll, of Breckville, Ohio, in 1937. "Sparrow" Young's record is the best in Grand American history in that he broke his hundred from twenty-three yards, an unequaled performance.

Firing in the Grand American is expensive as compared with rifle and pistol matches. Entry fees alone total $60.00. Shooters wishing to participate in the "optionals" —a wagering system whereby each shooter backs himself against the field or against shooters in his own class—drop another $117.50 into the pot. Add to that the cost of a full case of shells, plus traveling expense, and incidentals, and a tidy sum is involved. But the prizes are big, too. The normal payoff is around $50,000 in purses, prizes and "optionals." Purses and prizes this year were in war bonds—and there were plenty of them!

In normal years, the field, firing at 1900 targets in eight days, shoots away more than 1,000,000 shotgun shells, 12-gauge. Almost forty tons of lead fly, and the targets, if piled one atop the other, would tower seven miles into the air! Every three years the land in front of the long firing line is "mined" for the lead spilled upon it; and, amazingly enough, nearly 90 per cent is recovered!

Jasper Rogers, thirty-five-year-old war plant toolmaker from Dayton, Ohio, this year winner of the big Handicap with a score of 97 x 100—the best score registered in the past four years—gives what may or may not be a formula of training for the event. Rogers had never before been near the top even in a club shoot. Asked what he did for recreation and exercise, aside from trapshooting, Rogers said, "I chew tobacco!"

GRAND AMERICAN CHAMPIONS

Grand American Handicap: Jasper Rogers, 35, of Dayton, Ohio; 97 x 100 at eighteen yards; defeated five others in shootoff with 47 x 50.

Women's Grand American Handicap: "Skipper" Winski, 17-year-old Wellsburg, West Virginia, high school girl; 90 x 100 at seventeen yards.

Doubles: Rudy Etchen, 20-year-old sailor, shooting instructor at Navy Pier, Chicago; 96 x 100 (retained title).

Veteran (over seventy): Jacob L. Bales, 73, of Albany, Indiana; 96 x 100.

Junior (under eighteen): Bobby Stifal, 17, of Casey, Illinois; 99 x 100.

Sub-Junior (under fifteen): Roy Foxworthy, 14, of Indianapolis; 95 x 100 (retained title).

Preliminary Handicap: *Men*—James A. Sabata, 29, of David City, Nebraska; 98 x 100. *Women*—"Skipper" Winski, 90 x 100. *Professional*—Art Cuscaden, Tampa, Florida; 95 x 100.

North American Clay Target (Sixteen-Yard Championship): *Men*—Orla C. Booher, 48, of Farmland, Indiana; 200 x 200. *Women*—Miss Florence Mos, 33, of Cincinnati, Ohio; 192 x 200. *Professional*—J. R. Hinkle, 64, of Corsicana, Texas; 195 x 200.

Husband-Wife: Mr. and Mrs. Isaac Andrews, Spartanburg, South Carolina; 377 x 400.

Father-Son: Ralph Jenkins, of Orleans, Indiana, and Lt. William J. Jenkins, of Purcell, Oklahoma; 391 x 400.

State Team: Indiana; 974 x 1000.

Service Team: Army; 484 x 500. Navy; 480 x 500.

Champions of Champions (For State title-holders): *Men*—L. E. Smith, of Peru, Indiana; 99 x 100. *Women*—Miss Betsy Herndon, Georgetown, Kentucky, 94 x 100.

Class Champions: AA—H. L. Cheek, Clinton, Indiana; 100 x 100. A—O. C. Booher, Farmland, Indiana; 100 x 100. B—William Harding, Toledo, Ohio; 100 x 100. C—A. H. Fuller, Sturtevant, Wisconsin; 99 x 100. D—Bernie Judd, Hamilton, O.; 98 x 100.

Service Men (individual): Sgt. Mercer Tennille, Tyndal Field, Florida; 99 x 100.

That Elusive *Best* CARTRIDGE

By W. A. CARUTH, C. E., CH. E.

ALWAYS SEEKING the elusive *best* combination of greatest power and least recoil, a group of my riflemen friends and I initiated a series of experiments in California. We used every type of rifle procurable and every cartridge and variation of components imaginable in a range of calibers from .217 to .256. The following data and graphs represent our final idea of the last word in a small bore load.

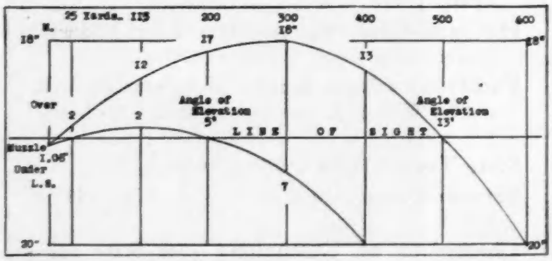
This newly designed cartridge will have the mild recoil of the new .30 M1 Carbine load. In power, it will surpass the .30-30 at seventy yards and the .250-3000 at 200 yards with constantly increasing superiorities. Its average over 300, 600 and 900 yards will equal that of the Krag. At 1000 yards its remaining energy will be only 8 per cent under that of the .30 caliber M2 of recently revived loading.

This cartridge utilizes a .22 caliber bullet of seventy-five grains weight at a muzzle velocity of 2850 fps. It has the high ballistic coefficient of .562 to enable it to compete with heavier charges at the longer ranges.

Reference to the trajectory curves shown here will demonstrate that a .22 caliber cartridge of this type provides damaging fire at battle distances with sighting arrangements of utmost simplicity.

This cartridge will have an over-all length of two and one-half inches, and breech pressures well within limits easily handled by a number of short actions which the arms manufacturers are already tooled up to produce. It should prove desirable for lighter and more manageable machine guns. Having a better wind bucking projectile than any of the super-speed "fade-outs," such a .22 innovation would be lethal for all soft-skinned game in war or peace.

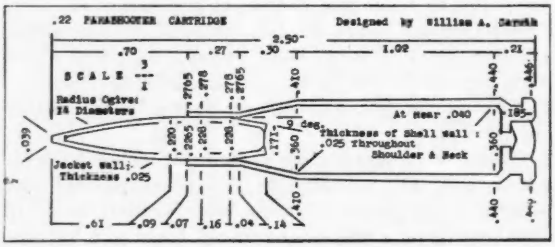
The smaller small-bores, with politeness at the buttplate and man-sized power at the muzzle have always fascinated riflemen. The writer is no exception. The "Imp" was one of the cartridges which intrigued me and the .236 Navy another. Some thirty-seven years ago I was much interested in .236 Navy Straight Pull loads. I had my own ideas regarding improvements on this cartridge, too. Among these were a different primer and bullet of either spire or spitzer variety.



At 600 yards this bullet's trajectory is still so flat that there is no mid-range "dead area" where troops would be safe.

It was, and still is, my opinion that this cartridge was never given a fair chance to show its capabilities. The results at Guantanamo, Samoa, and Pekin all seemed to prove that the .236 lacked stopping power. But this has always been denied by its friends. The fault or failure was largely due to a poor sighting system and the too frequent inability of the marksmen *to make hits.*

When the Navy-Lee was first issued it had a battle sight set at 600 yards. This was unfortunate. The *maximum* range for effective infantry fire in combat is probably around 600 yards. But this 600 yard range is not a satisfactory sighting *minimum* for even a cartridge of high ballistic efficiency. The .236 Navy was definitely not one of these.


.22 PARASHOOTER CARTRIDGE
Designed by William A. Caruth
2.50"
.70
.27
.30
1.02
.21
SCALE 3/1
Radius Ogive: 14 Diameters
.039
.2765
.278
.278
.2765
.410
.440
.446
At Rear .040
.185
9 deg.
Thickness of Shell wall : .025 Throughout Shoulder & Neck
.220
.2265
.228
.228
.171
.360
.360
Jacket wall; Thickness .025
.410
.440
.61
.09
.07
.16
.04
.14

It has the mild recoil of the .30 M1 Carbine load, yet more power at 70 yards than the .30-30, more power at 200 yards than the .250-3000. At 300 to 900 yards it equals the Krag!

The Navy-Lee, with belt aim, could make hits on an approaching enemy between the waist and shoulders, from 600 down to 500 yards. But the mid-point trajectory was so far above the line of sight that charging foemen were comparatively safe inside 500 yards and until they got to within 150 yards. From 400 yards in to 200 yards the bullets were passing harmlessly two feet or more overhead. The Navy was perfectly justified in condemning this rifle. The straight-pull action left much to be desired and suitable powders for this cartridge were still three decades in the future. But our failure to further explore the possibilities of the .236 load is not so easily understood.

Our erstwhile friends, the Japanese, have modernized their .256 cartridge to handle a nine gram, or 139 grain, pointed bullet at a muzzle velocity of 2500 feet per second. This is little more in ballistic efficiency than the .236 Navy might have shown. The .22 caliber cartridge here suggested is frankly an offshoot of the .236. It is, however, lighter in weight, cheaper to manufacture, gentler in recoil and has *twice as much remaining energy at 600 yards.*

The design of this cartridge calls for a case with a long sloping shoulder. The short, abrupt shoulder is more versatile in the combustion of various loads using different types of powder, it is true, but the gradual taper from the body to the neck of this shell is stronger, less likely to split and will last through more reloadings. It can also be better adapted to a single load. And the single-load idea is the premise on which this job has been built. Some of us are old-fashioned enough to believe and follow the old adage, "find one good load and *stay with it.*"

The drawings showing cartridge plan and trajectories are offered to suggest the mathematical possibilities within the scope of a .22 caliber cartridge of 2.50" over-all length. They are not, by any means, above modification.

Diameter across lands	.220"
" mean, engraved bullet	.226
" across grooves	.228
" bullet before firing	.228
Number of grooves	4
Width " "	.130"
" " lands	.0428"

Rifling—one turn in 9.5 inches.

Bullet—jacketed .025" in thickness, core 95% lead, 5% antimony. "C" equals .562, weight 75 grains.

	Velocity in feet per second	Energy in foot pounds
At muzzle	2850	1353
" 200 yards	2524	1061
" 600 "	1936	624
" 1000 "	1450	350

The bullet is of spitzer form with the ogive drawn upon a radius of 14 diameters.

Length—point	.77"	truncated from	.8454"
" —cylinder	.16		
" —boat-tail	.18	reduction taper	9 degrees
Length—Total	1.11"		

Weight of complete cartridge will be 270 grains.

The case is rimless with straight inside and outside walls. The powder space in the loaded shell is .1225 of a cubic inch.

Head-space is controlled and entrance into the chamber is checked by a square shell mouth of sufficient thickness. Before loading the shell neck will have an inside diameter of .2265" and the bullet of .228" diameter with tapered tail swaged into position and held by pressure both in front and in back of its cylindrical body. The portion of the bullet so held will have a length of .235", or about the same as with the .30 caliber M1 load. The lip of the shell will grip the projectile by contracting or springing back to its original size, instead of by indented crimping.

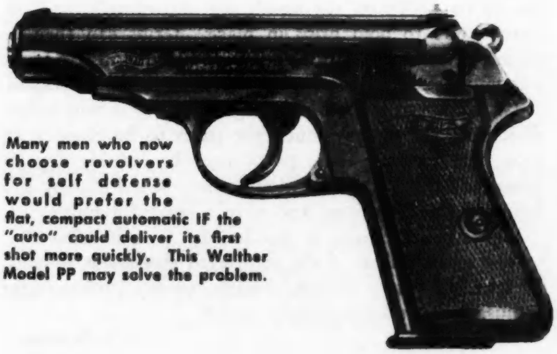
Accepted and standard measurements are assumed for the primer pocket and extraction cannelure.

For military purposes, an elbow type peep-sight of 90 degree folding leaf construction, placed as far to the rear on the piece as possible, is suggested. With the proposed cartridge such a sighting arrangement set for 200 and 500 yards, can assure at its higher adjustment, battle hits at all ranges from the muzzle to 600 yards. The vertical trajectory spread with belt aim on the erect human figure is confined within the average distance between the shoulders and the knees.

Whenever a reduction in caliber is considered, the cleaning problem in a small-bore service rifle is a ghost which haunts the proceedings. This was the case fifty years ago when the Springfield .45-70 was facing its exit before the Krag and the Lee. It was feared that the rank and file would be unable to care for the smaller rifled bore and the unfamiliar bolt mechanism. But they did. Since then a lot of water has gone over the dam and today we have the greatest and best prepared group of embryo riflemen it has ever been the privilege of American officers to command. Most of those worries over the care of finer bores and more delicate working parts can be allowed to slip into the limbo of the past. It will only be necessary to show them *what* to keep clean and *how*. The boys will know the *reason why* themselves.

Double Action Automatic

Ever since the advent of the automatic pistol, handgunners everywhere have argued the pros and cons of the automatic versus the revolver as defense weapons. Aside from personal preferences and prejudices, it seems to simmer down pretty solidly to this: The double-action revolver is a quicker weapon for the first shot than the automatic—because the revolver can safely dispense with the safety "gadgets" essential to the safe carrying and handling of the automatic; gadgets that have to be released before the first shot from the "auto" can be fired. On the other hand, for a dozen shots, or a hundred, the "auto" outspeeds the revolver—not so much because of actual firing speed as because of its clip-magazine which allows quicker reloading. Because of the prevalent feeling that the first shot is pretty important, revolvers far outnumber the automatics in the holsters of law enforcement officers and others who depend on the handgun as a self-defense weapon.



Many men who now choose revolvers for self defense would prefer the flat, compact automatic IF the "auto" could deliver its first shot more quickly. This Walther Model PP may solve the problem.

However, plenty of men who carry revolvers for the reason above mentioned agree that the "auto" would suit them better (because it is flat, more compact to carry, and because of its undeniable superiority for sustained fire) if somebody would only produce an automatic as fast on that first shot as the revolver.

Actually, the Walther Company, of Germany, did solve this problem as far back as 1932, or thereabouts, with their Walther Cal. 7.65 mm. Models PP and PPK. Both models are also made for our .22 L.R. cartridge.

This gun has a number of features worthy of emulation by American gunmakers, most noteworthy of these being its "double-action" first shot. In other words, the first shot can be fired by pulling the trigger, as with a double-action revolver. After the first shot, the gun functions as a semi-automatic. Because of this innovation, it is as fast for the first shot as a revolver and has the sustained-firing advantages of the auto-loader.

Other worthwhile features include a magazine-release similar to that in use on our .45 Colt auto; a safety lever which lowers the hammer when safety is pushed and at the same time blocks it by introducing a steel barrier between hammer and firing pin (like the automatic safety used in our revolvers) so that the gun can be carried safely with safety off, ready for that double-action first shot; a small rod which, by protruding slightly from the frame, indicates when there is a cartridge in the chamber; a phosphorus-bead front sight for night shooting; and a slide that locks back when magazine is empty.

Mr. Jerzy Bratman, Polish pistolman who has put these guns through fairly extensive tests (including the super-rapid-fire matches common in Europe and featured in Olympic meets) says, "In all conditions the pistol behaved well and no single jam was encountered. The gun lies well in the hand, the trigger pull is crisp and uniform. At fifteen meters I was able to get ten-shot groups 4 x 3 cm., offhand.* Average time for quick draw, shoulder holster, and double-action first shot, one-half second.

While it is not to be supposed that the Walther Models PP and PPK are perfect, these are all good, practical ideas toward meeting definite needs in semi-automatic handguns both for versatility and for safety. And since German gunmakers have shown little hesitancy in the past to copy American improvements, would it be too unethical to suggest that American manufacturers might do well to do some thinking along these same lines?—*Material from article submitted by* Mr. Jerzy Bratman, Poczta Mszczonow, Adamowek, Poland.

What They're Totin'

Shortage of firearms for civilian defense has brought to light many oddities in the way of arms. A survey of Guards in a limited section of our west-coast war production area revealed the following items:

Thirty-six per cent carried .38 Special revolvers. Most of these are good Colt or Smith & Wesson guns, some of them of ancient vintage but still serviceable.

Two of the guns examined looked like good Smith & Wessons until closer inspection disclosed "Made In Spain" under the faked trademarks. One of these was being carried loaded with three 200-grain Super-Police and three Hi-speed metal-piercing loads! So loaded, that piece of pot-metal had almost the same potential deadliness as a hand-grenade, with the shooter on the receiving end! Still another "palooka" was made to resemble the old Single Action Colt and was stamped "Cowboy Ranger. Made in Belgium."

There were many old S.A. Colts—real ones—from .32-20 to .45. Two of these were Bisleys. Another single action gun noticed was a .44 S. & W. Russian.

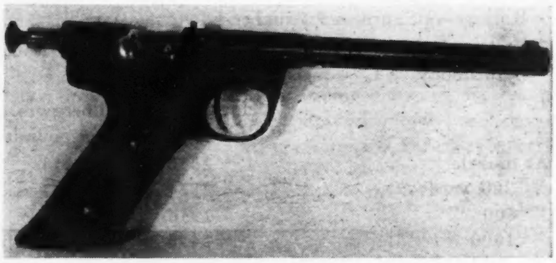
There were a number of Colt and Smith & Wesson Model 1917's, and several .41 Colt Army Specials. One ex-Deputy Sheriff, City Detective, et cetera, carried one of these .41 Colts loaded with .38 Special cartridges! Some people just don't give a *damn*, do they?

Very few automatics were carried but those few ranged from a short-barrelled .22 Hi-Standard up to one of the rare Savage .45's. Of all guns checked, only two had adjustable sights. One .45 S.A. had no front sight whatever.

Just the same, don't go monkeying around our war plants with any nefarious intent! Most of these men are well armed. Some of their guns are old, but they'll shoot; and some of those Guards can shoot 'em!

—Bill Rothermel.

If You Can't Buy It, Make It!



Home made out of rifle parts and scrap, it serves until better ones are buyable.

I wanted a handgun. But after answering several ads in the Rifleman and finding the gun already sold or that the price was too steep, I decided to do something drastic! I decided to *make* it!

I have always been handy with tools; and I had a chunk of .22 caliber rifle barrel, a receiver from a Model 67 Winchester rifle, a piece of half-inch boiler plate, and various bits of iron and spring.

The first thing I did was to fit the barrel to the receiver. I did this work on my lathe. However, no lathe work would be necessary if you could pick up a used rifle with barrel and receiver already fitted.

I then obtained a pattern for the frame simply by tracing around a handgun belonging to a friend. This part was hack-sawed from that piece of half-inch boiler plate, then fitted to the barrel by means of two screws, one driven *up* through the top of the trigger guard and the other *down* through the rear of the receiver into the frame. The frame was sawed out on top just enough to make room for the trigger mechanism. *After* the mechanism was fitted in place, I used two pieces of half-round strap-iron to conceal the mechanism. All parts were then smoothed up and put aside, ready for blueing.

For grips, take an old rifle stock and saw off a piece at the throat about five inches long, then saw the piece down through the center so that you have two slabs, one for each side of the stock. Smooth up the sawed sides and place each piece on the sides of the stock. Trace the outline of the stock on the wood, saw accordingly, and use four screws to hold grips in place. Grips can then be sanded smooth and stained. I used an oil finish. I put a thumb rest on my stocks, but this is up to the individual.

Next comes the job of blueing. It's easy if you follow directions and do not touch the parts to be blued with your bare hands. These parts must be *entirely* free of grease and dirt. I used a Montgomery Ward blueing kit, followed the directions, and have a beautiful finish.

Sights can be made or purchased. I made mine.

The specifications of the completed gun are as follows: Weight, fifty-two ounces; length, twelve inches; sight radius, seven and five-eighths inches.

—J. O. Burns.

---

* *Meter = 3.2808 feet. Centimeter = .394 inch.*

KILLING POWER

By E. BADEN POWELL

PART VI

THE BULLET ACTUALLY LOSES about one-half its velocity in 1000 yards and travels about 5500 yards with a starting velocity of 3000 f.s. When started at only 1500 f.s., it actually travels about 4500 yards. The .22 Long Rifle at 1100 f.s.m.v. travels a mile. Heavier, poorly shaped, short pistol bullets, starting at 800 f.s. travel about the same distance. Old black-powder rifle and present-day pistol bullets, therefore, lose comparatively little velocity in 100 and 200 yards. The heavier ones with best sectional density have almost as much killing power at 200 yards as near the muzzle. This fact constitutes a warning of their danger at long distances that is well worth remembering. Hence, the claims of the old timers that the .38 to .45 caliber bullets, weighing from 250 to 500 grains, killed deer, elk, bear and buffalo about as well at 300 yards as at fifty yards when hit in the chest, was undoubtedly true. Their velocities were reduced from 1200 to 1400 f.s. at the muzzle to 900 or 1000 f.s. at 300 yards.

This reduced the foot-pounds energy by as little as 25 per cent, compared to a reduction of from 50 per cent to 75 per cent when using such modern bullets as the Swift factory loads at the same distance. With short bullets such as the .44-40 the discrepancy would be still greater at the higher and lower velocities. Short bullets really are practical only at low velocities. (Refer to Table II—page 34, AMERICAN RIFLEMAN, May, 1943.)

Therefore, practical bullet killing power expressed in maximum animal weight is dependent upon the answers to the following simple questions:

1. How fast is the bullet traveling at time of impact?
2. How large is it?
3. How heavy is it?
4. What proportionate amount of living tissue will it affect during its penetration compared to a sphere of the same material and weight possessing the same energy and velocity? What is its shape and construction, and what is the resistance of the animal tissue at the impact velocity of the bullet?
5. What type of living tissue is it required to destroy, and how quickly must it kill?
6. How accurately can it be placed, considering all existing conditions, shooting offhand, sitting, at standing or running game?

This killing power may be determined by use of the Powell Ballistic Formula "A", viz:

$$\frac{V\ S\ W\ E}{K} = P$$

In which V = the striking velocity of the bullet expressed in feet per second;
S = the volumetric content of the bullet expressed in cubic inches;
W = the weight of the bullet expressed in grains;
E = the efficiency of the bullet for destruction of tissue expressed in percentage;
K = a constant, depending upon the amount of the different type tissue destroyed, the time required to kill, and the practical accuracy possible under average hunting conditions;
P = maximum animal weight expressed in pounds.

For Hydraulic Transmitted Shock, Powell Ballistic Formula "B", viz:

$$\frac{V^2\ W}{K} = P$$

In which V = the striking velocity of the bullet in feet per second;
W = the weight of the bullet in grains;
K = a contant, 73,000,000 (based on 163 f.p. energy expended per pound "fluid" in the animal's connected hydraulic system, per 1/3500th of a second);
P = maximum animal weight in pounds.

The ballistic charts herewith appended (also see September and November issues) are not offered as a panacea for all the hunter's troubles. They have been compiled primarily in the interest of game conservation. They are to guide *Mr. Average Hunter* in the selection of a gun sufficiently powerful for his particular needs. These charts furnish him with as authentic and unbiased a "yardstick" as possible. Based, as they are, upon a vast amount of credible data, by these he can compare the relative killing power of the different cartridges under practical game shooting conditions, stripped of competitive advertising claims. Their language is that which the average American can understand and the explanation is sufficient to cover the subject adequately.

Only the latest and most powerful factory loads, as catalogued in the various cartridge companies' handbooks are given in the charts. Only those makers loading to highest velocities are listed, although other makers may load the same cartridge to give a lower muzzle velocity or with a different bullet. The *handloads* given are the most powerful ones which are safe to recommend with regular components. Higher velocities are sometimes obtained by the expert experimenter in special loads and guns.

These handloads are recommended for several reasons: most have been loaded by custom companies, some have been tested and reported on by the Dope Bag, and these loads are representative of the most popular calibers in use.

The ranges given are believed to be the maximum at which the particular loads listed will enable the average hunter consistently to place the bullets in an area the size of the brain or spine ("HEAD" column), heart and lungs ("CHEST" column), or whole body ("BELLY" column) of animals of the weights referred to, under actual hunting conditions. The situations obtain when the animals are apt to be shot at while they are charging, running away, or are in dense vegetation or timber, in precipitious mountains, in poor visibility, etc. Then the shooting is more apt to be offhand than in the steadier positions. In most cases it is done with sights and rifles of a type that precludes the more accurate cartridges exhibiting their highest degree of accuracy. In other cases the trajectories, wind-bucking abilities, etc., limit the range at which the hunters are capable of grouping the bullets in an area the size of the "vitals" of the animals

CHART 3

CARTRIDGE	BULLET		VELOCITY in f.p.s.		PATH OF BULLET					WIND DRIFT				TISSUE TYPE	ANIMAL WEIGHTS					VALUE of "C"	TIME of BULLET FLIGHT	LOADED BY
	wgt. in grs.	type	muzzle	200 yds.	midway of "0" range		100 yds.	150 yds.	200 yds.	50 yds.	100 yds.	150 yds.	200 yds.		head K= 100,000		chest K= 200,000		belly K= 400,000			
					in.	in.	in.	in.	in.	in.	in.	in.	in.		50	100	150	150	200			
.25-20 Win. Hi-Vel	86	SP	1710	1142	+1.33		0	-6.76		.53	2.12	4.79		MR	112	50				.184	.436	WPX
.25-20 Win. Hi-Speed	60	HP	2210	1302	+ .67		0	-4.98		.53	2.12	4.79		MR	70	31				.147	.357	ALL
.30 Rem. Hi-Vel	170	SP	2170	1655		+2.00		0	-6.45		1.00	2.25	4.00	LR	585		256		120	.286	.317	ALL
.30-30 Win. Hi-Vel	165	HP	2200	1665		+1.97		0	-5.53		1.05	2.36	4.20	MR	560		244			.278	.315	RP
.30-30 Win. Hi-Vel	170	SP	2200	1685		+1.92		0	-5.27		.98	2.20	3.90	LR	595		267		121	.289	.312	ALL
.30-30 Win. Hi-Vel	180	BP	2120	1590	+ .61		0	-3.72		.28	1.11	2.53		HR	640	297				.272	.328	P
.30-40 Krag	225	BP	2110	1690	+ .60		0	-2.98		.20	.80	1.80		HR	1010	480				.348	.317	P
.300 Savage	220	BP	2220	1725	+ .49		0	-3.04		.22	.88	1.97		HR	635	398				.305	.305	P
.303 Savage	180	BP	2120	1590	+ .63		0	-3.60		.28	1.11	2.53		HR	640	298				.272	.328	P
8mm. Mannlicher	236	SP	2100	1700		+2.12		0	-4.61		.75	1.70	3.00	LR	1105		445		236	.364	.316	WR
.32 Rem. Hi-Vel	170	SP	2200	1650		+1.99		0	-5.30		1.05	2.36	4.20	LR	591		256		119	.268	.315	P
.32 Win. Hi-Speed	80	HP	2050	1150	+ .91		0	-6.76		.68	2.72	6.12		MR	115	49				.131	.401	ALL
.32-20 Win. Hi-Vel	115	SP	1600	1086	+1.61		0	-7.72		.58	2.32	5.22		MR	190	85				.181	.468	W
.32-40 Win. Hi-Vel	165	SP	1950	1395	+ .84		0	-4.66		.35	1.40	3.15		LR	490	225		104		.234	.364	ALL
.33 Win. Hi-Vel	200	SP	2180	1596		+2.02		0	-6.30		1.22	2.75	4.90	LR	810		345		158	.249	.324	ALL
.333 Jeffery	300	SP	2200	1800		+1.87		0	-4.54		.78	1.74	3.10	LR	1885		855		405	.385	.304	B
.35 Rem.	200	SP	2180	1596		+2.04		0	-6.19		1.22	2.75	4.90	LR	810		345		158	.249	.324	WX
.35 Rem.	210	BP	2080	1485	+ .69		0	-4.08		.34	1.35	3.05		HR	840	389				.232	.342	P
.35 Win.	250	SP	2160	1685		+2.02		0	-4.86		.88	1.97	3.50	LR	1265		555		262	.310	.313	ALL
.350 Rigby	310	SP	2150	1720		+2.04		0	-4.75		.83	1.86	3.30	LR	1950		875		413	.347	.312	B
.351 Win. Self-load.	180	SP	1850	1315	+1.01		0	-5.36		.39	1.57	3.55		MR	550	252				.232	.387	ALL
9mm. Mauser	262	SP	2100	1605		+2.18		0	-6.06		1.06	2.36	4.20	LR	1350		590		275	.291	.328	B
.360 Express	320	SP	2200	1755		+1.87		0	-4.90		.85	1.91	3.40	LR	2125		950		448	.341	.307	B
9.5mm. Mannlicher	270	SP	2200	1660		+2.04		0	-4.75		1.00	2.25	4.00	LR	1500		650		303	.273	.313	B
.38-40 Win. Hi-Speed	145	HP	2060	1146	+ .91		0	-6.00		.68	2.72	6.12		MR	375	160				.129	.401	R
.38-40 Win. Hi-Vel	180	SP	1770	1116	+1.30		0	-6.94		.61	2.45	5.52		MR	510	225				.159	.436	WP
.38-55 Win. Hi-Vel	255	SP	1600	1188	+1.49		0	-6.64		.39	1.57	3.55		MR	962	445				.254	.438	ALL
.38-72 Win.	275	SP	1500	1175	+1.68		0	-7.26		.37	1.50	3.37		MR	1060	500				.307	.460	W
.400 Magnum Express	400	DE	2150	1705		+2.04		0	-5.15		.93	2.08	3.70	HR	3250		1450			.337	.316	B
.401 Win. Self-Load.	200	SP	2140	1425	+ .66		0	-3.02		.40	1.62	3.66		LR	775	350		156		.192	.345	ALL
.405 Win.	300	SP	2220	1685		+1.95		0	-5.11		1.05	2.36	4.20	LR	1860		810		378	.280	.312	ALL
.416 Rigby	400	DE	2245	1780		+1.77		0	-4.85		.85	1.91	3.40	HR	3400		1510			.330	.301	B
.44-40 Win. Hi-Speed	160	HP	1980	1082	+1.03		0	-6.72		.76	3.05	6.85		MR	430	185				.120	.425	R
.44-40 Win. Hi-Vel	200	SP	1570	1026	+1.79		0	-9.16		.66	2.65	5.95		MR	556	245				.152	.488	WP
.45-90 Win.	300	SP	1530	1096	+1.77		0	-7.88		.49	1.97	4.45		MR	1250	570				.208	.471	WRP
.450 Express	480	DE	2175	1725	+ .55		0	-3.00		.21	.85	1.91		HR	4725	2220				.333	.310	B
.465 H.&H. Express	480	DE	2125	1655	+ .61		0	-4.16		.24	.95	2.14		HR	4600	2160				.311	.320	B
.470 Long Rifle	500	DE	2125	1660	+ .58		0	-3.50		.23	.93	2.08		HR	5000	2350				.313	.319	B
.475 Jeffery	480	DE	2200	1685	+ .54		0	-2.14		.26	1.05	2.36		HR	4725	2215				.292	.315	B
.476 Wesley Richards	520	DE	2100	1650	+ .61		0	-3.44		.24	.95	2.14		HR	5350	2510				.324	.324	B
.50-110 Win.	300	SP	1610	1073	+1.51		0	-7.72		.59	2.35	5.30		MR	1290	575				.170	.467	W
.500 Express	570	SM	2150	1675	+ .57		0	-3.24		.23	.93	2.08		XR	6550	3080				.310	.316	B
.577 Wesley Richards	750	SM	2050	1595	+ .67		0	-3.56		.25	1.00	2.25		XR	10,830	5090				.311	.332	B
.600 Jeffery	900	SM	1950	1535	+ .79		0	-3.28		.26	1.02	2.30		XR	15,000	7000				.329	.348	B
.30-'06 Springfield	172	SM-BT	2200	1865		+1.50		0	-2.89	.15	.60	1.35	2.40	XR	600					.482	.296	H

For an explanation of the Chart see Page 27.

of the size designated. It should also be remembered that although a large elephant weighs more than fifty times as much as a large man and has the largest brain, heart and lungs of any living species of land animal, yet the brain is less than twice the size of the brain of any normal man. The heart, lungs and other vitals offer less than ten times the area, as a target, than that of a deer weighing one fiftieth as much. The size of their vitals is not proportionate to the weights of the animals.

Four "K" values have been used in determining the killing power of the bullets: the first, when massed nerve cells such as the spine or brain are destroyed directly; the second, when combination shock and *rapid* hemorrhage cause quick suffocation; the third, when "nerve transmitted shock" alone is depended upon for the killing power; and fourth, for "hydraulic transmitted shock" when the bullets are so constructed that at the striking velocity they will expend their energy in 1/3500 of a second. Bullets at 4000 f.s. begin expanding while penetrating a rib bone. They sometimes blow up and expend their energy in the "fluid" in as short as 1/10,000 of a second, and create hydraulic transmitted shock that will kill animals weighing three times as much as those given in the charts. In this case "K" equals 25,000,000. All four "K" values are purposefully conservative. They are intended to insure consistent, humane killing and to prevent unnecessary wounding and suffering. (*To be continued.*)

CHART 4

CARTRIDGE	BULLET		VELOCITY in f.p.s.		PATH OF BULLET					WIND DRIFT				TISSUE TYPE	ANIMAL WEIGHTS						VALUE of "C"	TIME of BULLET FLIGHT	LOADED BY
	wgt. in grs.	type	muzzle	300 yds.	midway of "0" range		150 yds.	225 yds.	300 yds.	75 yds.	150 yds.	225 yds.	300 yds.		head K= 100,000	chest K= 200,000		K= 400,000		belly K= 75,000,000			
					in.	in.	in.	in.	in.	in.	in.	in.	in.		75	150	225	225	300	75			
.218 Win. Bee	46	HP	2860	1350	+1.22		0	-8.18		.96	3.77	8.50		MR	51	21					.151	.488	W
.22 Win. Hornet	45	SP	2650	1240	+1.54		0	-8.58		1.03	4.12	9.28		LR	45	19		7		30	.150	.505	WR
.22 Savage Imp.	70	SP	2780	1950		+3.16		0	-8.76	.39	1.58	3.56	6.30	LR	125		52		24	65	.309	.387	WPX
.240 Magnum	100	SP	2960	2135		+2.71		0	-6.86	.32	1.27	2.87	5.10	LR	274		116		53	102	.330	.257	B
.25 Rem. Hi-Speed	87	HP	2710	1600	+1.69		0	-4.76		.38	1.52	3.42		MR	161		77				.218	.383	R
.25 Rem. Hi-Vel	117	SP	2300	1565	+1.65		0	-8.72		.53	2.12	4.80		LR	287	130		59		70	.299	.477	ALL
.25-35 Win. Hi-Speed	87	HP	2650	1580	+1.29		0	-7.16		.33	1.32	2.98		MR	178	78					.220	.445	R
.25-35 Win. Hi-Vel	117	SP	2300	1465	+1.81		0	-9.28		.33	1.32	2.98		LR	260	125		56		87	.258	.497	ALL
.250 Savage	100	HP	2810	1930		+3.16		0	-8.56	.41	1.65	3.71	6.60	MR	257		107				.292	.366	ALL
.256 Newton	129	HP	2770	2010		+3.20		0	-7.97	.36	1.42	3.22	5.70	MR	425		182				.342	.383	X
.257 Roberts	117	SP	2630	1800	+1.14		0	-7.10		.43	1.72	3.88		LR	330	150		68		92	.294	.357	WRX
.257 Roberts	125	SP	2900	2210		+2.57		0	-7.07	.29	1.17	2.65	4.70	LR	425		185		86	127	.394	.412	CH
6.5mm. Mannlicher	145	SP	2360	1665	+1.56		0	-7.74		.46	1.80	4.05		LR	456	210		96		95	.388	.464	W
.270 Win.	150	SP	2770	1985		+3.08		0	-9.61	.36	1.42	3.22	5.70	LR	575		244		111	134	.327	.383	WRX
.275 H.&H. Magnum	175	SP	2690	2015		+3.28		0	-8.19	.33	1.32	2.98	5.30	LR	770		333		156	161	.380	.387	X
7mm. Mauser Hi-Speed	139	HP	2900	2090		+2.85		0	-7.43	.34	1.38	3.09	5.50	MR	515		220				.328	.366	RX
7mm. Mauser Hi-Vel	175	SP	2460	1790	+1.36		0	-6.80		.28	1.10	2.47		LR	700	325		49		125	.387	.431	WPX
.276 Dubiel	175	SP	2800	2085		+2.91		0	-8.11	.32	1.27	2.87	5.10	LR	800		346		160	165	.374	.375	CH
.280 Ross	180	PP	2700	2270		+2.75		0	-6.96	.21	.85	1.91	3.40	LR	850		365		186	171	.560	.380	B
7.62mm. Russian	180	PP	2810	2130		+2.87		0	-7.73	.31	1.22	2.76	4.90	MR	590		258				.382	.370	R
.30 Newton	180	HP	2850	2000		+2.99		0	-8.49	.37	1.50	3.36	6.00	MR	845		365				.312	.378	X
.30 Rem. Hi-Speed	110	HP	2520	1380	+1.56		0	-8.90		.83	3.33	7.50		MR	264	114					.181	.490	R
.30-30 Win. Hi-Speed	110	HP	2720	1515	+1.25		0	-7.40		.92	3.66	8.22		MR	287	124					.193	.477	WR
.30-30 Win.	125	HP	2560	1500	+1.40		0	-6.06		.73	2.90	6.55		MR	354	155					.214	.468	P
.30-30 Win.	150	HP	2380	1520	+1.66		0	-8.14		.61	2.45	5.51		MR	494	215					.257	.476	WX
.30-40 Krag	180	PP	2660	2010		+3.33		0	-8.79	.31	1.25	2.81	5.00	MR	555		243				.394	.388	WP
.30-40 Krag	180	SP	2460	1870	+1.32		0	-6.42		.26	1.00	2.26		LR	745	340		160		130	.400	.418	ALL
.30-'06 Springfield	150	PP	2960	2275		+2.50		0	-6.50	.27	1.07	2.42	4.30	LR	625		273		128	180	.402	.347	WRP
.30-'06 Springfield	172	PP	2700	2130		+3.11		0	-7.57	.27	1.10	2.47	4.40	LR	756		336		157	159	.462	.377	W
.30-'06 Springfield	180	SP	2710	1905		+3.40		0	-9.22	.41	1.65	3.71	6.60	LR	810		337		154	153	.313	.396	ALL
.30-'06 Springfield	180	HP	2690	2150		+2.99		0	-7.29	.24	.95	2.14	3.80	MR	825		365		174	154	.465	.372	ALL
.30-'06 Springfield	180	SP	2720	1645		+3.47		0	-9.53	.45	1.80	4.05	7.20	MR	805		333				.286	.403	P
.30-'06 Springfield	220	SP	2410	1615	+1.45		0	-4.24		.27	1.08	2.37		LR	1090	505		230		182	.304	.415	WPX
.30-'06 Springfield	220	DE	2410	1615	+1.45		0	-4.24		.27	1.08	2.37		MR	1090	505					.384	.415	RX
.30-'06 Springfield	225	SP	2310	1645	+1.66		0	-6.22		.45	1.80	4.05		MR	1075	495					.330	.462	P
.300 Savage	150	SP	2660	2010		+3.36		0	-8.69	.35	1.40	3.15	5.60	LR	560		243		113	126	.304	.388	W
.300 Savage	180	SP	2380	1715	+1.49		0	-7.48		.43	1.72	3.88		LR	710	330		151		118	.348	.447	WRX
.300 H.&H. Magnum	225	SP	2580	1880		+3.78		0	-9.98	.40	1.60	3.60	6.40	MR	1200		515				.382	.416	P
7.65mm. Mauser	154	SM	2700	2105	+1.00		0	-5.46		.22	1.15	2.59		XR	605						.428	.379	B
.303 British	174	HP	2450	1910	+1.31		0	-5.84		.32	1.27	2.87		MR	700	320					.452	.410	X
.303 Express	215	SP	2500	1785	+1.35		0	-6.45		.42	1.70	3.82		LR	1062	490		222		156	.323	.428	B
7.9mm. Mauser	170	SP	2530	1660	+1.29		0	-7.84		.53	2.10	4.71		LR	660	300		133		122	.289	.440	RP
8 x 75mm. Mauser	227	SP	2720	2045		+3.18		0	-8.19	.33	1.32	2.98	5.30	LR	1205		517		285	200	.385	.384	G
8mm. Lebel	170	SP	2610	1855	+1.20		0	-8.30		.33	1.32	2.98		LR	690	315		143		133	.328	.387	R
.318 Wesley Richards	250	SP	2400	1705	+1.54		0	-7.22		.46	1.82	4.10		LR	1290	632		290		167	.326	.449	B
.32 Rem. Hi-Speed	110	HP	2630	1375	+1.42		0	-8.74		.83	3.33	7.50		MR	275	118					.177	.478	R
.32 Win. Sp. Hi-Speed	110	HP	2630	1375	+1.42		0	-8.74		.83	3.33	7.50		MR	275	118					.177	.478	WR
.32 Win. Sp. Hi-Vel	170	SP	2260	1455	+1.87		0	-8.48		.64	2.55	5.72		LR	585	265		117		90	.264	.500	WPX
.33 B.S.A.	176	SP	2900	1980		+2.87		0	-8.78	.41	1.62	3.66	6.50	LR	812		356		152	160	.280	.376	B
.333 Jeffery	250	PP	2500	1775	+1.36		0	-6.62		.44	1.76	3.94		MR	1440	680					.252	.430	B
.348 Win.	150	SP	2880	1570	+1.08		0	-6.66		.73	2.90	6.55		LR	504	242		104		128	.185	.428	ALL
.348 Win.	210	VP	2510	1615	+1.37		0	-7.68		.63	2.50	5.62		MR	1000	445					.257	.457	P
.35 Rem.	150	HP	2280	1273	+1.87		0	-8.50		.49	1.67	3.77		MR	480	198					.187	.526	R
.35 Whelen	275	SP	2535	1680		+3.87		0	-10.39	.42	1.67	3.77	6.70	LR	1770		750		345	207	.341	.462	CH
.35 Newton	250	HP	2660	2085		+3.26		0	-8.91	.32	1.27	2.87	5.10	MR	1580		680				.408	.389	X
9.3mm. H.&H. Brenneke	300	SP	2600	2070		+3.02		0	-7.57	.33	1.30	2.92	5.20	MR	2345		1005		470	276	.358	.374	G
.375 H.&H. Magnum	235	HP	2800	1980		+3.05		0	-9.05	.44	1.75	3.94	7.00	MR	1435		590				.275	.385	WX
.375 H.&H. Magnum	270	SP	2720	1990		+3.43		0	-8.47	.35	1.40	3.15	5.60	LR	1840		785		363	235	.332	.388	WX
.375 H.&H. Magnum	300	SP	2540	1840		+3.84		0	-10.00	.35	1.40	3.15	5.60	LR	2115		900		414	227	.349	.419	WX
.400 Neidner	350	SP	2500	1635	+1.66		0	-7.62		.36	1.45	3.26		LR	2585	1165		540		214	.327	.450	CH
.404 H.&H. Magnum	400	SP	2500	1650		+3.64		0	-10.29	.41	1.65	3.71	6.60	LR	3810		1620		740	312	.337	.414	B
10.75mm. Mauser	347	SP	2310	545	+1.75		0	-8.64		.56	2.25	5.07		LR	2520	1145		515		208	.288	.490	G
.425 Westley Richards	410	DE	2350	1685	+1.53		0	-7.44		.43	1.72	3.88		MR	3650	1675					.344	.462	B
.505 Gibbs	525	SM	2350	1565	+1.73		0	-7.48		.52	2.10	4.73		XR	5800	2670					.288	.467	B
.30-'06 Springfield	172	[illegible]	2880	2235		+2.74		0	-6.62	.25	.98	2.22	3.95	XR	885						.462	.327	FA

EXPLANATION OF CHARTS

Bullet Type, L=solid lead; SP=metal cased soft point; HP=metal cased hollow point; LHP=lead hollow point; SM=solid metal cased; LWC=lead wadcutter. **Path of Bullet,** above (+), on (0) and below (—) point aimed at in inches when line of sight is ¾ in. above bore of gun at muzzle. **Wind Drift** of bullet in inches for air currents of 10 ft. per sec. (6.8 mph.) at "0" F. temperature and 30 inches barometric pressure, blowing at 90 deg. angle to path of bullet. **Tissue Type,** LR=low resistance animal tissue, MR=medium resistance animal tissue, HR=high resistance animal tissue, XR=thick skin and bone animal tissue. **Animal Weights,** maximum weight animal in pounds, designated projectile will kill humanely by spine, brain or other ganglionic shock; by heart, lung or other pulmonary hemorrhages; and by nerve transmitted shock when shot in liver, stomach, intestines or other viscera at maximum practical ranges in yards. **Loaded by,** W=Winchester, R=Remington, B=British, P=Peters, X=Western, G=German, H=handload, ALL=all US cartridge makers.

Simplified Small Arms Ballistics

FOR THE SPORTSMAN AND SOLDIER

By the OLD COACH

IV. POWDER AND PRIMER

(Continued from September issue)

If we could have a theoretically ideal fuel for our internal combustion engine—an ideal gunpowder—the specifications would probably read something like this:

1. The powder must ignite easily and regularly and burn at a controlled rate of speed.
2. It should be entirely consumed at the precise instant the bullet leaves the muzzle of the gun. (This is to insure that none of the energy generated by the burning powder is wasted nor any unburned powder left in the gun after the bullet has departed.)
3. It should burn in such fashion as to emit a constantly increasing volume of gas until the entire grain is consumed. (This is to insure that as the bullet moves down the bore the increasing space behind the bullet will be continuously filled with powder gases. Such constantly expanding gases insure constant acceleration of the bullet up to the instant of departure from the muzzle.)
4. The powder must be capable of manufacture in large quantities under stringent chemical and mechanical control—but the price must remain low.
5. It must be of such granulation and composition as to be possible of rapid loading by automatic machines into little, narrow-mouthed brass bottles (cartridge cases) with such accuracy that there will be no variation in the weight of charge from one cartridge to another.
6. The structure of the powder grains must be so tough that they will withstand, without chipping, crumbling or cracking, the shock of the detonation of the primer and the terrific compression within the cartridge case as the pressures build up. (If the grains should break into smaller pieces or develop cracks, the whole carefully planned rate of burning would be uncontrollably speeded up. Pressures would skyrocket. Inaccuracy and possibly a burst gun would result.)
7. The powder should not be affected by dampness, dryness, heat, or cold.
8. It should retain all the above characteristics indefinitely under all conditions of transportation and storage.

Of course, no such powder has ever been made—or ever will be made. Some of the conditions stipulated are mechanically impossible of fulfillment. Some of the points which are ideal from the standpoint of the ballistician are definitely undesirable from the standpoint of the sportsman and soldier. Specifications one, four, and six are regularly met by modern smokeless powder. Specification five is regularly met except that reasonable manufacturing tolerances have to be allowed. These tolerances are, however, almost unbelievably small. Perfection with regard to specifications seven and eight will probably never be attained because perfection on these points has never been attained in any product.

Specifications two and three are impracticable from the shooter's standpoint. If the powder was not all consumed until the instant the bullet left the muzzle, there would be a rush of incandescent gas from the muzzle that would create havoc. The white-hot gases traveling at enormous speed would "balloon" out of the muzzle, probably scorching and setting ablaze everything near the end of the barrel. The air turbulence would be terrific. First the expanding gases would push the air aside, creating a partial vacuum, then the air would rush back into this vacuum with a resounding clap like a peal of thunder. This "muzzle blast" would add a wicked "kick" to the recoil of the gun. It would stir up a whirling cloud of dust, dry leaves, and grass and other debris which would completely obscure the shooter's view of his target. Any hope of concealment for the soldier would disappear in this same brightly illuminated mass of incandescent gases and whirling debris.

On this specification, therefore, the ideal of the ballistician must give way to the practical requirements of the sportsman and soldier. The powder must be designed so that it will all be consumed while the bullet still has some distance to travel down the bore. This gives the gases a chance to cool somewhat and to lose speed before emerging from the muzzle. Cooler gases moving at lower speed mean less muzzle flash and less muzzle blast. Of course, the muzzle velocity of the bullet will be lower than would be the case if the gases were pushing the bullet all the way down the bore. The shooter is, however, more than willing to sacrifice a little velocity in order to reduce muzzle flash and muzzle blast.

Specification three is *undesirable* for the same reasons as are applicable to two. In addition it is mechanically impossible to build a powder grain which will burn with a constantly *increasing* burning area. When the entire surface of a solid object is burning the object becomes constantly smaller. The burning area cannot possibly grow larger once the entire surface has been set alight, unless a perforated disc is made to burn *only* from the inside. Specification three will, therefore, never be met for the two good reasons that (1) the shooters do not *want* it, (2) the manufacturer cannot *make* it.

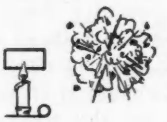
Modern smokeless powders are made in a variety of grain shapes and sizes. In general the *shape* of the grain is determined by the manufacturer while the *size* of the grain is determined by the size of the gun in which the powder is to be used. The basic shapes of grain are—

1. Cylindrical with one or more perforations running completely through the grain from end to end.
2. Cords or ribbons.
3. Thin, flat grains in a variety of shapes—diamond, square, hexagonal, circular, circular-perforated (like a washer for your hose but not much larger than one of the "jewels" in your watch).
4. Roughly spherical ("ball powder") or sand-like grains.

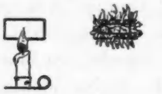
The single perforated cylinders are generally used in the United States for high velocity rifles with large capacity, bottle-neck cartridge cases, and relatively heavy bullets. The single-perforated cylindrical grain is also used, in large granulations, for some cannon. In larger cannon the multi-perforated grain is used. American multi-perforated smokeless powder has seven perforations, one in the center and six evenly spaced around a circle midway between the center and edge of the grain. This form is used in order to obtain the necessary structural strength while retaining the ignition and burning advantages of the perforated cylindrical grain. These advantages are (1) improved ignition throughout the mass of the charge, and (2) provision of a burning surface which remains practically constant until the entire grain has been consumed. This means that a constant volume of gas will be given off throughout the period of combustion and the bullet will be given a steady push down the barrel for whatever distance is desirable. This action will naturally result in higher velocities and lower breech pressures than will the quick, hard blow on the base of the bullet that results from burning grains which give off a constantly *decreasing* volume of gas after their entire surface has been ignited.

The constant gas emission of the perforated cylindrical grain is not hard to understand. If we set fire to a solid cylinder, it will burn all over its exposed surfaces—the ends and the outside of the cylinder. As it burns it will become constantly shorter and smaller in diameter. As the burning area becomes constantly smaller the amounts of gas given off will be constantly smaller from the time of ignition until the grain is all consumed. If, however, we pierce the cylinder with a hole running from end to end and then light the exposed surfaces, we have a distinctly different situation.

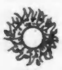
The powder burns on the ends, around the outside circumference of the grain, and around the circumference of the perforation which extends all the way through the grain. Although the outside diameter of the cylinder constantly *decreases*, the diameter of the perforation constantly *increases* as it burns. Of course, the grain is also burning on its end surfaces and is growing shorter all the time—but the area of the expanding surface inside the grain remains the same as that of the contracting surface outside the grain so an automatic balance is maintained.



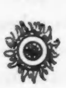
When heat or shock is applied to primer mixture it disintegrates or literally explodes, violently and instantaneously



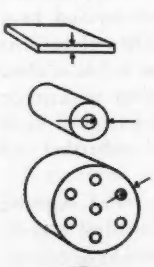
If heat is applied, a propellant explosive burns over only its exposed surfaces



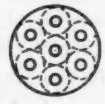
Powder burns only on exposed surfaces so the solid grain of it is constantly decreasing in size as long as it is afire



If cylindrical grains with perforations extending through their centers are set afire the burning areas inside the grain grow larger as those outside get smaller



Web thickness is the thinnest dimension of powder grains. . . . The arrows on the next three diagrams point out web thickness



If constant web thickness was maintained around every perforation in the multi-perforated grain the powder would have a fluted surface. To insure strength the powder is manufactured with a surface which is both smooth and cylindrical

Thus, with a single perforated cylindrical grain it is possible so to calculate the diameter of the outside of the grain and of the perforation that a constant volume of gas will be given off throughout the burning time. Unfortunately, this efficiency cannot be practically attained with the larger multi-perforated grain. The multi-perforated grain does leave "slivers" which have not been burned by the time the main portion of the charge has been consumed. They are just so much wasted powder as far as the ballistic performance of the gun is concerned but they have served their purpose by adding structural strength to the grain during most of its combustion cycle. Some are blown down the bore behind the projectile and add something to the muzzle flash. They account for some of the grass fires that start forward of the muzzle. They also partly account for the "flash-backs" that may occur when the breech of the gun is opened unless the bore has first been blown clear of burning slivers and gas by a jet of compressed air.

The minimum dimension of a powder grain is called the "web thickness." In a cylindrical grain with single perforation the web thickness is the thickness of the powder measured from the perforation to the outer circumference of the grain. In a multi-perforated grain the web thickness is the distance from one perforation to the next. In the case of powder in the form of ribbons or small flat grains, the web thickness is the distance from the top to the bottom of the grain. Web thickness is always the minimum thickness between any two diametrically opposed surfaces. In powders having the same composition, the grain with the thinnest web will naturally have the quickest burning time.

In shotgun shells, pistol cartridges, and rifle cartridges using lightweight bullets or straight cases, quick-burning powders are required. The generation of gas at a constant rate for a relatively long period of time is not nearly so important as instant ignition and quick, complete combustion of the entire charge. For such loads the various types of grains described in numbers three and four are used. The reason is clear.

The cords and ribbons of powder (No. 2) are used in some European countries for certain types of loading. The British have been partial to this type of powder—which explains why so many American correspondents on duty in England, or getting their first military experience with British troops, refer to all smokeless powder as "cordite." All smokeless powder is definitely *not* "cordite." As a matter of fact, not all British guns are loaded with cordite. The British have fired millions of rounds of small arms and artillery ammunition in this war, as in the last, loaded with American-type perforated grain powder.

In America we have also had the custom of referring to smokeless powder as "dense" powder or "bulk" powder. This system of designation is, so far as I know, entirely and uniquely American.

Americans have always been the world's greatest handloaders. In the days of black powder the powder charges were measured by dipping up the powder in a measuring scoop, leveling the powder across the top edges of the scoop with a wooden straight-edge, and dumping the powder into the cartridge case. The modern refinement of weighed powder charges was unknown. When smokeless powders first began to replace black powder, the smokeless grains were of the irregular "sand-type" grain and they were made of such size that an equal charge of smokeless powder or of black powder, measured in the old powder scoop-measure, would do an equal amount of work—i. e., develop the same velocity and pressure. In other words the "bulk," the space occupied in the cartridge case, was the same for the smokeless powder as for the black powder. The smokeless actually *weighed* less than the black but no handloader weighed his charges anyhow so he was not confused by this circumstance.

These early smokeless powders were gradually superceded by more efficient powders designed for the more modern cartridges. The newer powders were manufactured with harder, denser grains taking up considerably less space in a cartridge case, to do a given amount of work, than had been true with black powder.

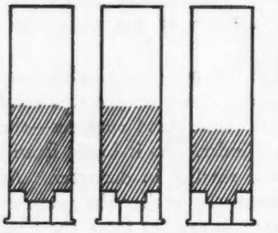
If the handloader wanted to use the new powders in his old black-powder type of cartridge he had to weigh the charge. The old "bulk" measuring system was out. This was when the designation "bulk" powder and "dense" powder came into American shooting language. "Bulk" smokeless powder could be measured "bulk for bulk" with black. "Dense" smokeless was the modern, hard grained powder. Although some modern smokeless powders have a grain structure that appears irregular and softer than the hard-glazed, high-intensity powders, there is no longer any true "bulk" smokeless made in this country.

All smokeless powders, whether "bulk" or "dense" and regardless of the form of granulation, are of two basic types. The powder man refers to these two types as "single base" and "double base." Sometimes "single base" powders are called "nitro-cellulose" powders and sometimes "pyro" powders. All three designations mean the same thing and arise out of the fact that gun-cotton of a certain degree of nitration is the single principal ingredient. The quantity of nitration varies.

Gun-cotton is nitrated in varying degrees dependent on its ultimate use. Its proper name is nitro-cellulose. When nitro-cellulose is manufactured with the particular degree of nitration needed to manufacture smokeless powder it is sometimes called "pyro-cotton" or "pyro-cellulose." Small wonder that the newcomer in the shooting world often finds himself lost in a fog of nomenclature when he goes forth to learn something of the technicalities of the game!

"Double base" powders are also called "nitro-glycerine powders." Both designations arise out of the fact that a combination of nitro-cellulose and nitro-glycerine form the twin main ingredient of the finished powder. Although nitro-glycerine is a true high explosive it has the quality of slowing down its explosive wave (it has "lower brisance") when it is absorbed into some other, less explosive material. Dynamite is an example of the commercial application of this characteristic. "Double base" powder is another example. In the manufacture of this kind of powder controlled percentages of nitro-glycerine are absorbed by the nitro-cellulose at the proper time during the powder-making process and the "double-base" product thus formed is then carried through the remaining steps necessary to produce grains of the desired burning speed. These speeds varied considerably.

For a quarter of a century there was a great deal of argument as to the relative merits and demerits of single base *vs* double base powder. In powder making and ammunition manufacture, as in all things, our knowledge has improved during twenty-five years and it is now pretty generally agreed that both sides were partly right. Everything depends on what job the powder has to do. In some cases single base powder is probably better. In many cases double base powder is to be preferred but the percentage of nitro-glycerine must be carefully controlled and the minimum amount used that will give the desired results. It was the failure to properly recognize the latter factor that gave the single base advocates their greatest "edge" in the old argument.



Showing relative bulk

Nitro-glycerine is a high nitrogen-content material. Its addition to nitro-cellulose as a base for the manufacture of smokeless powder adds enough nitrogen to appreciably increase the heat in the chamber of the gun during the period of combustion. This added heat increases the rate of expansion of the powder gases which, in turn, increases the energy imparted to the bullet. Consequently, *for a given velocity*, a smaller charge of nitro-glycerine powder will be required than of nitro-cellulose powder. If equal charges were used the nitro-glycerine powder would develop more heat than the same charge of nitro-cellulose powder, but a smaller charge of the hotter powder develops the same bullet velocity! The net result is that the smaller charge of hotter powder develops about the same chamber temperature as the larger charge of cooler-burning powder, the velocity remains the same—and the old argument about the comparative chamber temperature developed by the two powders is shown to have been a rather useless argument. It is not difficult for us today to see how trifling such contests in opinion were. But we must not overlook the fact that much of what they did was done by "rule of thumb." A gun laboratory and the study of scientific ballistics had to wait for a more modern time. They thought, we know.

Everyone has always agreed that the higher nitrogen content of the double base made it easier to ignite and resulted in more complete and uniform combustion throughout the charge. This made for improved accuracy. Most long range target shooters have been willing to put up with any increased chamber heat and erosion that the double base powder might cause in order to have the benefit of the better accuracy. Pistol shooters, requiring quick, positive ignition and combustion have always favored double base powders. The subject has been discussed here at such length because it lies so close to all the problems confronting the student of interior ballistics—and also to give him the background of facts in the matter if you encounter any still-embattled and battling "argufiers."

We have mentioned frequently "controlled burning time" or "controlled combustion." Such control is made necessary by differences in bullet weight, weight of charge, barrel length, chamber capacity, shape of cartridge case, permissible pressures, desired velocities, and other factors.

(*To be continued*)

We Look for Trouble—and Get It!

(*Continued from page* 13)

Sbeitla, in mid February, the only portion of our entire battalion to remain back was a wrecker unit that waited in the town, while it was under fire, in the hope of getting some of our equipment out. The wrecker is always last in a convoy; it's his job to see that nothing drops past him—and if it does, to hook onto it and bring it along. He's always "tail-end-Joe" and he deserves every bit of credit coming to him.

Wrecker crews are sometimes confronted with apparently impossible situations; yet some sort of solution always seems to present itself eventually. One bitterly cold and rainy night in early January a column of three medium tanks, one two and a half ton truck, and one heavy wrecker was winding its way up over the high hill country just to the east of Tebessa, near the border line of Algeria and Tunisia. About eight o'clock the lead vehicle ran onto the tail-end of a closely bunched column of standing vehicles.

A personal investigation on the part of the officer in charge (me) disclosed that a large, ten-ton, French gasoline truck, loaded to the brim, had slipped off the road immediately on the other side of a narrow concrete bridge spanning a relatively deep wadi. She'd slipped around on her frame in such a manner that the front wheels hung over the embankment on one side and the rear wheels on the other. Consequently, for hours the road had been effectively blocked. If the truck had been empty, there'd have been no problem; but she was full and in those days gas was much too valuable to jettison in quantities of thousands of gallons. It was necessary for the tanks to be up front by late the next day.

We couldn't wait for someone else to do something—which everyone else was doing. The bridge was just wide enough for the tanks, fortunately, so we inched one of them forward onto the bridge. With the tank firmly planted on the bridge we used her as a "dead-man" and cabled the front end of the truck to the eye-bolts on the tank. Then, risking all, we ran, or more correctly slid, the wrecker down into the wadi. Fortunately, she ended up (in mud close to the top of the wheels) facing in the right direction. The winch cable was then attached to the other end of the truck; and with the tank anchoring the forward end—the gas truck was righted on the road as the cable was reeled in. Once centered on the road, the wrecker was used as the "dead-man" to steady the rear end of the truck—the tank backed up pulling the truck forward, and eventually clear of the bridge. Once on the road she moved off under her own power.

When the column went over we were left alone in the middle of the night, the wrecker still down in the wadi, completely incapable of getting out by herself. It had been raining for many hours; off the roads was nothing but mud, two feet deep, and the clay surface of the road was almost as slippery as glass. The three mediums were brought up and hooked onto the wrecker using every inch of cable we could find. With all three in "low" and the wrecker in "low-low" they all moved gradually forward. One cable snapped with a crack like a cannon, but the others held and eventually the mud covered wrecker stood on the crown of the road. The whole job, which I've explained in a few minutes, actually took over six hours. It was two o'clock of a cold, wet morning before we again started our trek forward.

When the maintenance battalion went into operational bivouac, camouflage was of primary importance. Of course, it wasn't always possible. In desert country the best you can hope is to confuse the enemy aircraft as to the identity of your particular vehicle. You can fairly well accomplish that with the issue nets. However, in wooded country it is possible to so completely conceal your vehicle that it is impossible to detect from the air.

In open country, where there is no possibility of fooling the enemy, it is possible to work more openly. Consequently, you will find most of the automotive repair men, for example, working on equipment scattered around the immediate vicinity of their shop truck. Not far away will be a series of slit trenches, and probably sitting on the piled up dirt will be the soldier's helmet. That's where he'll be when he needs it. He can't work in it—so he leaves it there. His rifle may be there too, or it may be propped up on the vehicle he's working on. For hundreds of yards around will be scattered all sorts of shot-up, burned-up, and wrecked trucks, tanks, cars, and whatnot. There may be three men, or so, working on one half-track, and one man all by himself a hundred yards away crawling over another. They're probably "cannabalizing"—making one usable half-track out of two, or three, unusable ones.

When necessary parts are not available—as they so often are not—this is the common practice. It is done with everything; from tanks to pistols, although it's considerably more common with vehicular equipment than with small-arms. It's almost always possible to carry along an adequate supply of all the parts of a hand or shoulder arm. But how many tank transmissions, or half-track differentials can be toted around? So, they take the radiator from one half-track, the engine from another, and put the third back in running condition. But what's to be done with all the still usable parts of the two "cannabalized" vehicles? Well, we'll take what we can—tires, instruments, gun mounts, engine parts, etc. We add them to our "stock pile" which we carry with us in two two and one-half ton trucks. The rest of it we leave. Maybe we can come back and get it later or perhaps someone else will pick it up. With the stuff that's on those two trucks there could be built—with very little missing—probably two or three "jeeps" and almost a whole half-track. There's nothing on there that we won't have use for eventually; and no matter how much we do take—it's always what we left behind that we'll most need.

Seldom does a maintenance battalion remain long in one place; it is a mobile organization and it moves constantly—going where it is most needed and where it can best do the job. The longest period we ever stayed in one place in the battle zone was about two weeks. More often it was a matter of a few days. Practically all travel is done at night; the enemy will find out soon enough where—there's no sense in leading him to it. No matter where or at what time of the day or night the organization goes into bivouac, that bivouac must be made with operational maintenance in mind. In other words; it must be assumed that while there—regardless for how long—maintenance will be performed. Often we just about got to the point where we were ready for "business" when the order came thru to "up stakes" and hit the road again. Eventually, one gets used to it.

Possibles and Impossibles

by FRANK J. KAHRS

I have often wondered why more clubs do not have covered firing points, but the answer always seems to be that they are pretty expensive to construct, and besides, "Our boys ain't no sissies; they can take it," is one of the answers.

Well, that may be all right about not being sissies, and all that sort of thing, but there is no harm in being comfortable while you enjoy firing over the Dewar or getting off 40 shots at 100, and also it is not much fun trying to keep your equipment dry while it is raining.

Those of us who wear glasses, and there are many of us, find it a big help not to have the rain drops splashing against our glasses and dimming the sight. I recently learned from one of the officers of an Illinois rifle club that they have solved the problem by a simple, inexpensive arrangement of posts, stakes and guide lines to suspend a canvas top, 103 feet long and 8 feet wide. And boy! what a joy it is for the club members to go out now and enjoy their favorite sport!

I have seen all sorts of firing points and I recall one in Texas of which the boys were very proud. It was made of discarded corrugated galvanized iron. My first reaction was that when the sun hit that iron and heated it up it would be hotter than the hinges of Hades underneath, but to my surprise it was nice and cool.

I have also seen some that were made of scrap lumber and slashings from nearby lumbering operations, covered with tar paper. In every case the boys could not understand why someone hadn't done something about this sooner, because it surely increased the pleasure of shooting.

Now the Illinois boys are proud of their covered firing points and want other folks to know that perhaps they are missing a bet by not realizing how a little comfort can make shooting so much more enjoyable.

* * *

The other day I had a letter from an old pistol-shooting friend of mine whom I had not heard from in a long time. The letter was written from a prisoner-of-war camp; and this chap, having formerly been in police work, was Commanding Officer of a guard company, guarding a lot of prisoners brought back from the North African theater of operations.

Well, it made me think what strange bedfellows this war provides for our old friends whom we used to meet on the pistol ranges here and there.

BRIDGEPORT, CONN., OCT. 1943

Rifle Remington

SIGHT IN HUNTIN RIFLES NOW!

(AND HELP OTHERS DO SO TOO)

Another hunting season is here, and this year will be more important than ever to make every shot unt. For this year, table game is being counted o s a valuable and necessary addition to the nationa food supply.

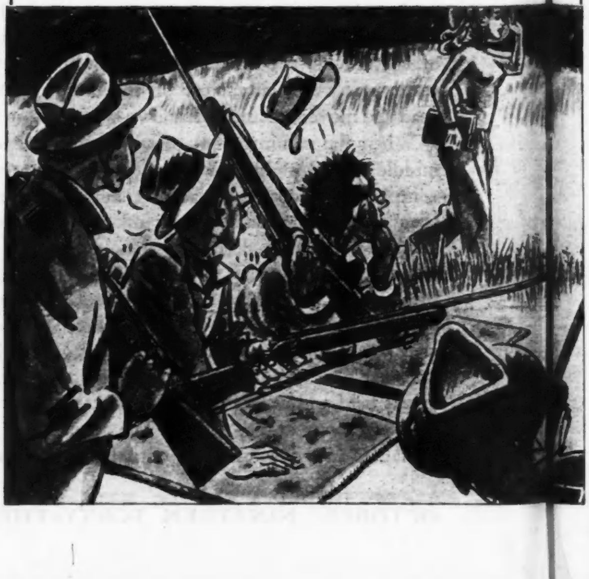
Right now—through your rifle club's facilitie-you can take steps which should convert more o our shots into table game when the season opens. Y can *sight in your hunting rifles.* We urge you to d.

But there are many hunters in your vicinit who do not belong to rifle clubs and hence may not h the means or the know-how to sight in their rifles. W not offer these people privileges of your club, and help em? Chances are that some, learning of the pleasu of target shooting for the first time, will become lar supporting members. And even if they don't, y invitation will be a generous and patriotic gesture hich will be very much appreciated.

Invitations to non-members can be on a pe -to-person basis—or on the broader basis of a noti hat your hardware or sporting goods dealer will p bly be glad to display in his store.

If this share-the-facilities idea appeals, why get it under way right now? *Remington Arms Co ny, Inc., Bridgeport, Conn.*

THERE'S ONE IN EVERY CLUB. . . . *The Mental H*



News

A PAPER FOR PEOPLE WHO SHOOT

This is a field worth fighting for!

YOU KNOW THIS FIELD—or one just like it. You have tramped its yellow stubble when the air was crisp and the leaves were red. You have seen cottontails scuttle through a thicket, the thrilling flight of a pheasant, the bursting of a covey of quail.

Boys who found adventure in this field have grown up and gone away—many of them to European fronts, to the South Pacific, to Alaska. But when they think of home, this field is one of the things they like to remember—a crisp, crackling autumn day, the open season, that great-to-be-alive feeling when a man and his dog walk out on the land.

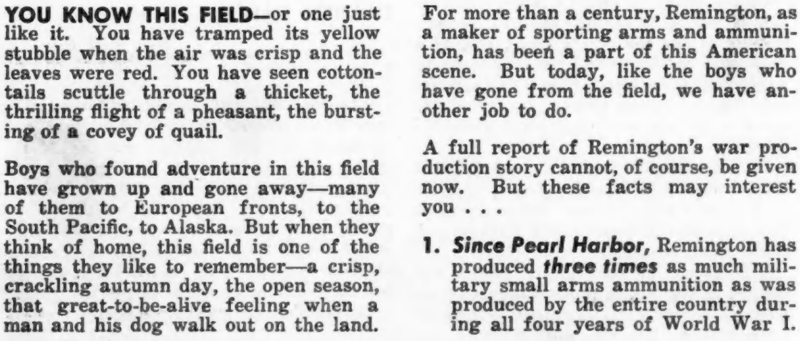
For more than a century, Remington, as a maker of sporting arms and ammunition, has been a part of this American scene. But today, like the boys who have gone from the field, we have another job to do.

A full report of Remington's war production story cannot, of course, be given now. But these facts may interest you . . .

1. ***Since Pearl Harbor,*** Remington has produced ***three times*** as much military small arms ammunition as was produced by the entire country during all four years of World War I.
2. ***Every working day,*** Remington produces more than enough military rifles to equip an entire infantry regiment at full fighting strength.

Like every American, we look ahead to the time when a man and his gun will again be headed for peaceful days in the woods and fields. When those days come, we'll again be serving our sportsmen friends with Remington rifles and shotguns, Nitro Express shells, Kleanbore Hi-Speed .22's, Core-Lokt big game bullets. *Remington Arms Company, Inc., Bridgeport, Conn.*

"Nitro Express," "Kleanbore," and "Hi-Speed," are Reg. U. S. Pat. Off.: "Core-Lokt" is a trade mark of Remington Arms Co., Inc.



Remington

DU PONT

POWDER SMOKE: READERS COMMENTS THE NEWS DESK

RE-LOADS . . .

FIFTH FREEDOM

Alexandria, Virginia.

Editor:

Everywhere one sees posters depicting the Four Freedoms. How about hammering home the *Fifth* Freedom: *The Freedom from infringement on the right to own and bear arms?*

It is the most important freedom of all, because with it assured the others follow as a natural consequence!

What about a fifth-freedom poster?

Frank F. Reynolds,
Lt. Cmdr. USNR.

ADVERTISE—THEN DUCK!

Atlanta, Georgia.

Editor:

Next time I put an ad in The Rifleman it will be a part of the bargain that you furnish me a suit of armor, two private secretaries, and three trained nurses! (A quart of good Scotch might help, too.)

I have received letters in response to my recent ad—ordinary letters and air-mail letters; I've received telephone calls, telegrams, post office money orders and Western Union money orders, checks, cash, and cussings—from all non-Axis-occupied quarters of the globe! One dear brother called long-distance and, when I told him the gun had been sold long since, informed me sadly and sorrowfully but very firmly that my ancestors were uncouth or worse else I'd have held the gun for him!

Yes, brothers, if you want fast and furious action, just advertise some item of good value in The Rifleman!

Hal Drake.

FORMULA FOR CLUB SUCCESS

Cornwall-on-Hudson, N. Y.

Editor:

Last Sunday, August 29, there were some thirty-odd people at our outdoor range. About six of these were visitors, six more were members of our current Small Arms class, and the balance were Club members practicing for our approaching Cornell Trophy Match.

It seems a far cry back to the fall of 1937 when a half-dozen of us decided to try and organize a Club. We were all "plinkers", but none of us knew anything about precise small-bore shooting. There was but one target rifle in the crowd, and that an antique eight-square Stevens SS. Nevertheless, we arranged for the loan, one night a week, of the 50-ft. indoor range at the N. Y. Military Academy, and each member was pledged to bring at least one new prospect each time, and to see that these visitors had plenty of opportunity to shoot!

The plan worked! Early in '38 we organized and got our NRA charter, and, in the fall of '42, we started our Small Arms School which has run ever since.

We have an active, thriving club now and our success is due, we think, to that rule laid down at the beginning: "When you sign up a new member, *teach him to shoot*." Merely being hospitable and friendly, lending him a gun and turning him loose, isn't enough. Unless you give these new men at least some basic training, if a new member doesn't show some steady improvement, you'll lose him. Have each member who seconds a new man agree to take the prospect under his wing and get him started properly. Teach him.

It means giving up some of your own shooting time, of course; but we like the results! And we sure have had some nice letters from some of our graduates now in the armed forces!

H. H. Tryon.

MODEL 70 TRIGGERS

Editor:

On page 28 of your issue for July appears an article under the title, "Winchester Model-70 trigger corrections", which brings up a clear-cut issue of shooting safety. The author poses the question of how light the trigger pull on a Winchester Model 70 can be set and still be absolutely safe. He thus recognizes the vital importance of this safety factor. On this point of safety we must definitely and emphatically take issue with his suggestion.

The article proceeds to tell of a trigger pull setting of two and one-fourth pounds on several Model 70 rifles which he has used and which he says proved safe for normal use. He then goes on to discuss methods for effecting these settings.

Safety has always been a first consideration of this company in the manufacture of its firearms. Winchester wishes to go emphatically on record that a trigger pull as low as two and one-fourth pounds is not a safe trigger pull on any Winchester Model 70 if, in fact, it is on any arm. The minimum factory setting on any Model 70 Sporting rifle is four and one-half pounds. No Model 70 Sporting rifle is allowed to leave the factory with a trigger pull under four and one-half pounds.

On the Model 70 Target rifle the minimum pull is set at three and one-half pounds. Because of the use of the target rifle as a single shot and because of the definite safety regulations under which it is used in target shooting, this lighter pull on the target rifle provides an adequate margin of safety for this purpose.

In line with this it should be noted that the National Rifle Association rules applying to the use of arms in target shooting provide that no rifle shall be used with a trigger pull below three pounds.

The danger of too light a trigger pull consists in the lack of protection against unintended or accidental discharge. When the setting is too low the amount of squeeze or pressure to pull the trigger is so slight that discharge may be effected without the shooter realizing that he is exerting pressure on the trigger. Furthermore, setting down or dropping the rifle, coming in contact with even a very slight obstruction or a slight jar, may set off the trigger.

Tragic evidence of this has come to our attention within recent months in cases of such accidental discharge resulting from slight jarring of the rifle when not in the shooter's hands. In each such case the trigger pull was found to be well below what this company regards as a safe minimum for safety.

Without disputing the specific cases offered in this article this company wishes to go on record with this cardinal rule of safety:

Do not set the trigger pull of any Winchester Model 70 Sporting rifle (regardless of caliber) at less than four and one-half pounds, nor of a Model 70 Target rifle at less than three and one-half pounds.

Winchester Repeating
Arms Company,
Division of Western Cartridge Co.

LOCAL BOY DOES ALL RIGHT

Editor:

When the Hempstead Rifle and Pistol Club was chartered, in 1941, the High School bandmaster, George T. Cannon, enrolled. With the exception of the writer, he was probably the worst shot in the club. He was not to be discouraged, however. He gave close attention to instruction, attended all meets, and before the season ended he was one of our best shots.

Then he joined the Marines.

The first time he fired the range he qualified as expert with both rifle and pistol and was given a medal as the outstanding man in his battalion. Upon completing his basic training he was given nine months foreign service in the Pacific area. He was then sent back to the States to enter the officers' school at Quantico, Virginia, where he won the all-time candidate-class record with pistol with a score of 96.5. With the '03 he shot 236 x 250; with the M-1, 210 x 240; and with the heavy machine gun, 172 x 200. He also made good with the Tommy gun.

Upon completing the candidate class, Cannon was commissioned Second Lieutenant and is now an Aviation-Ordnance Officer.

We're proud of him!

C. P. Robarts.

THANKS, PAL!

New York City.

Editor:

How do you, with a monthly magazine, manage to "scoop" the publishing field so consistently? Your articles on the M-3, the Sten Gun, the New Springfield, the German Gewehr, and the one on Italian weapons (to name only a few of the most recent) were all spot news, some of them ahead even of the newspapers. In fact, some of them haven't been touched by either newspapers or other magazines yet!

Congratulations, and keep it up!

J. U. Candlar.

We do try; and letters like this are always welcome! So are the frequent requests from Service Training Centers to reprint our articles for training purposes. One Ordnance Training School reprinted five from our July issue alone.—Ed.

CANTON PISTOL CLUB MATCH

The Third Annual Tournament, fired August 29th on the Canton (Ohio) Pistol Club range, drew a representative group of shooters and competition was close in all classes. John L. O'Brien, of Cleveland, topped the meet, winning the .22 calibre slow fire, the .22 National Match Course, and the .22 Aggregate, besides placing second in the Expert Class .22 Rapid Fire and Center-Fire National Match Course matches.

William Kendall, of Cannonsburg, Pa., won the .22 Timed Fire; and William Coyne, of Pittsburgh, Pa., was the trophy winner in the .22 Rapid Fire Match.

This club is doing a big job in the pistol training of the Auxiliary Military Police Plant Guards in the Canton area and is trying to find time and instructors, not to mention range facilities, to grant the request of the Commander of the local State Guard unit that State Guards be included in that training.

WINTER SIGHTER JOINS AIR CORPS

There's no keeping a good man down, nor a good gadget either; and while our Winter Sighting Device may never actually win its wings, it is helping a lot of Air Corps cadets to win theirs, as aerial gunners.

The following excerpts are from letters from Lt. A. H. Payne, training officer in the Flexible Gunnery School, Ft. Myers, Florida:

"One of our biggest problems here in training flexible gunners is to teach them how to align their sights. . . . Your information (manuals of rifle and pistol instruction) helps us a great deal because we have found that the .22 calibre rifle is the best introduction to a course of instruction in aerial gunnery yet to come to our attention.

". . . Enclosed you will find pictures of the Winter Sighting Bar we are using here. The machine gun was added to teach the students how to align machine gun sights for no lead and for various increments of lead. . . . (The gun) is a full scale model of a .50 calibre Browning flexible gun. . . . Most common (sight used) is a 70 mil ring rear sight and a post front.

". . . Our manual has to do with 'dead center' holds instead of 'six-o'clock' holds. We call 'zeroing' 'sight-harmonization'. Most of our targets are moving instead of stationary, and the only positions used are bench-rest and off-hand.

". . . The Winter Sighting Device has proven very successful in training our gunnery students in basic sighting."

COMING EVENTS

Registered Class "C" Tournaments

Iowa, October 10—Scott County Sportsmen's Second Annual Pistol Tournament. Sponsored by American Legion Post #26. J. G. Johnston, 219 W. 7th Street, Muscatine.

New York, October 10—3rd Annual Finger Lakes Small Bore. Canandaigua Rifle and Revolver Club. Edward Burmeister, 703 White Street, Canandaigua.

Illinois, October 11—Registered Rifle Tournament. Sponsored by Sheridan Rifle and Pistol Club, Inc. Joan Robasse, 39½ Clay Street, Highwood.

Kentucky, October 17—Kentucky-Ohio-Indiana Open Pistol Championship. Kenton County Revolver Club. James R. Shelton, 408 Delmar Place, Covington.

Pennsylvania, October 17 — Broomall Sportsmen's Club, Inc. Registered Pistol Tournament. Mrs. Alice Y. Matthews, 108 N. Green Hill Road, Broomall.

Nonregistered

Pennsylvania, October 10—Rifle. Holmesburg Fish & Game Association, Philadelphia. Mr. Harold W. Walcoby, 114 Hartranft Ave., Norristown.

Wisconsin, October 10th—Ninth Annual Duck Shoot, rifle and pistol. L. Masche, Ripon Rifle and Pistol Club, Ripon.

STOLEN GUNS

Colt Officers Model .32, Serial No. 643155 R, with Roper Grips, short action and patridge sights. Last seen in Yuma, Arizona. Notify, Lt. Daniel L. Berry, % Base Range Office, Fairmont Army Air Field, Geneva, Nebraska.

Colt Detective Special .38, Serial Number 466053. From John Moran, 1935 Martindale Avenue, Indianapolis, Indiana.

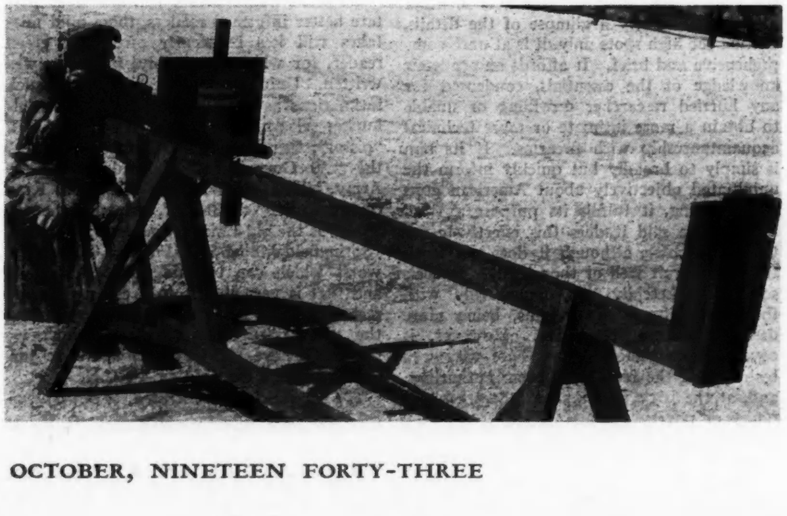
PENNSYLVANIA SMALL BORE

The sixth annual Pennsylvania State Smallbore Championships, September 5th and 6th, at Altoona, saw a fast field of 158 shooters from seven states and the District of Columbia competing for the Frank A. Hoppe Trophy and the state titles.

Charles Whipple, of Somerset, new State Champion and Hoppe Trophy winner, fired a 399-26X in the final match (a 100-yard any sight event) to nose out Wayne Moore, of Washington, Pa., with whom he was tied up to that point. Whipple's Grand Aggregate was 2392-171X, against Moore's 2391-143X. Third and fourth places went to Mart Henning (2390-150X) and Lt. I. N. Tekulsky (2389-162X) respectively.

The new NRA Basic Training Match, corresponding to the Army "E", was won by Walter "Bud" Lee, of Altoona.

This was an exceptionally well-handled match in a beautiful setting. Plans are under way to enlarge this Chief Logan Lodge range from fifty-four to one hundred firing points in time for next year's meeting.



Machine gun replaces rifle on Winter Sighter for Air Corps gunnery classes.

BENNER SETS NEW RECORD

With twenty-eight shooters competing in the Southern Indiana Rifle and Pistol Club registered match, August 22nd, Tech. Sgt. H. L. "Joe" Benner, of Fort Knox, Kentucky, set a new world's Timed Fire record by scoring seventy consecutive tens at twenty-five yards.

Firing under carefully observed registered match conditions, Sgt. Benner completed the twenty-shot Timed Fire Match with a possible and went on to add ten more perfect five-shot strings. His eleventh additional string showed one close nine. The twenty-shot match possible plus fifty additional tens gives Sgt. Benner a new world's record, Timed Fire, of 700 x 700, exactly doubling the previous record of 350 x 350, held since July 28, 1940, by Garfield Huddleston, of the Kansas City, Missouri, Police.

Benner won seven out of eight matches for a Grand Aggregate of 1437 x 1500. He was topped in the .22 calibre Slow Fire by C. J. Code, of Hallidaysburg, Pennsylvania. Code added to this triumph by winning three additional firsts and two seconds in the Expert Class competition, thereby topping his Class with a Grand Aggregate of 1377. Sgt. Ben Bledsoe, of Fort Knox, Kentucky, led the Sharpshooters with a Grand Aggregate of 1308; and Garland Graw, of Louisville, Kentucky, won the Marksman Class trophy with a Grand Aggregate of 1296.

TRI-COUNTY LEAGUE

Possibles were the rule rather than the exception at the Tri-County Pistol and Revolver League Registered Match held August 15, 1943, at the Lincolnwood Pistol and Gun Club Range. Sixty-eight competitors from five states were present, among them being Sergeant Benner, from Fort Knox, Kentucky, who won six first places, three seconds, and one third in the ten-event program.

Sgt. Benner scored a 200 in the .22 caliber rapid fire match, topping the listed Service record of 199. Doyal Rhymer, of South Bend. Indiana, won the .22 caliber slow fire with 185. Ed Neumann of Chicago fired a 199 in the .22 timed fire match to out-rank Benner, who then came up with his rapid fire possible and followed with a .22 National Match Course score of 291. Benner continued with wins in the center fire slow and timed fire matches with scores of 181 and 194 but relinquished the first place position to Chicagoan Arthur Kelchauser's 193 in the center-fire rapid fire event and to Naumann's 279 over the National Match Course. Benner completed the day by out-ranking Kelchauser in the .45 National Match Course and winning the aggregate with a 1709.

Otto Widemark, of Chicago, took the major share of the Expert Class awards, with Lew

Schuman and W. R. McCartney bossing the Sharpshooter Class, and George Hazlett, of Muscatine, Iowa, winning the Marksman aggregate with a score of 1600. The .22 caliber National Match Course four-man-team match went to the home club, Lincolnwood, with 1102, and a snappy 1077 by the Federal Reserve Bank of Chicago took the same match in center-fire.

FAIRMONT PISTOL

Fifty-one handgunners competed in the Sixth Annual Mountain State Pistol Tournament at the Fairmont Gun Club's new twenty-five target range on Sept. 5th.

Lt. Thurman E. Barrier won eight matches out of the eleven entered, while his buddy, C. A. (Smitty) Brown, copped first place in the .22 Rapid Fire Match with a 197. Barrier's 195 in the .22 Slow Fire Match upped the service record by four points. W. M. Beckett, W. Va. Police Corps, won the .22 National Match with a 288. W. M. Stark, former State Policeman, took the CF Slow Fire Match with a 184.

In the Expert Class I. B. Hale, of the F.B.I., took five firsts and two seconds. Sgt. L. W. Emrick, of the W. Va. State Police, took three firsts and four seconds.

Trooper L. L. Gum, of the W. Va. State Police, led the field in the Sharpshooter Class, taking five out of the eleven matches. In the Marksman Class George F. Zimmerman, Sparrows Point Police Dept., garnered two firsts and seven seconds.

Alice Matthews, Broomall, Pa., won the Bronze Medals for high lady in the .22 Aggregate and the CF Aggregate Matches.

MOVING PICTURES

NRA's new training film, "How To Shoot The Rifle", is finished and will be ready for distribution as soon as the laboratory can make copies. Watch for announcement of release date in an early issue of THE RIFLEMAN.

This is a film of which we can be, and are, justly proud. It is the last word (to date, at least) in the way of visual presentation of rifle instruction and should smooth the way for a lot of over-worked instructors in Civilian Clubs as well as in Service Training Camps where it is to be a part of basic instruction. The film is interesting as well as accurate, and is long enough to answer many of the "whys" as well as all of the "hows" of basic small-bore training.

WESTERN PICTURES

No cowboys, but three films produced by Western Cartridge Company and designed to irritate the travel-itch in all gunners. "Silvertip—She Say 'Socko!'" is a technicolor number on Canadian grouse and big-game hunting. Our only criticism is that, possibly due to over-fast projection, there seemed to be times when guns were handled less carefully than we would care to have them handled by our hunting companions. Otherwise, good. . . . "More Marksmen For America" is another technicolor job and one that will fill you with yearning if you're one of the "Men of Perry". That's what it's about, and it's all there, from Squaw Camp to Hogan's Alley. . . . "The Topps for Forty Years" is just what you might guess: an exhibition of fancy shooting by the Topperweins. Having named the actors, it is hardly necessary to tell you—it's a good show. (Don't write us; write Western.)

ON THE FIRING LINE

WITH THE PRE-INDUCTION TRAINING SCHOOLS

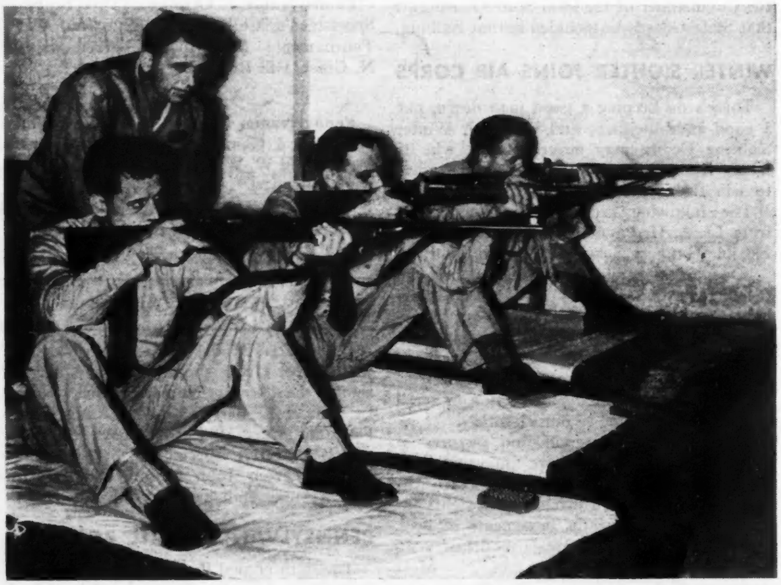
"Your enemy is tough, resourceful, and battle-wise. Your duty to yourself, to your men, and to your country is to be tougher, more resourceful, and BETTER TRAINED than that enemy in every phase of battle activity." GEN. DWIGHT D. EISENHOWER.

ON THE MAP!

Since May, 1942, when the New York Central Rifle Club, Cleveland, Ohio, opened its classes in basic marksmanship, 276 men and women have been instructed. This in spite of the fact that only twelve of the thirty-three active Club members could assist in the instruction, the remainder being either in military service or engaged in war work with hours that prevented their participation.

Until July 1, 1943, only male civilians between the ages of eighteen and thirty-eight were admitted for training, preference being given those expecting early military service. Early in July, however, the training was extended to include persons with military connections; and Rear Admiral Fred McMillan, Chief of the Field Bureau of Supplies and Accounts in Cleveland, designated Lt. (jg) Harry Thomas as liaison officer between the Services and the Club.

Since all of the Club instructors are work-



185 Naval officers jammed Cleveland range when Club offered to teach them to shoot.

NEW BOOKS:

"FIREARMS AND THEIR USE"

By W. T. CASTLES and V. F. KIMBALL

In three sections (shotguns, 44 pages; rifles, 71 pages; and handguns, 100 pages), this book gives a view of the whole shooting picture, not merely a glimpse of the details. Hitting the high spots only, it is at once comprehensive and brief. It affords an academic knowledge of the essentials, condensed for any hurried researcher unwilling or unable to obtain a more intimate or more technical acquaintanceship with firearms. If its aim is simply to broadly but quickly inform the uninitiated objectively about American guns and shooting, it fulfills its purpose.

It can be said it does this effectively for the non-shooter, although it does not teach the new recruit well or thoroughly. It deals somewhat sketchily and haphazardly with the care and use of firearms, being more descriptive than instructive. However, it covers its own shortcomings here very well by referring the reader to proper authorities, and, at the back, it has an excellent bibliography or reference list.

Praiseworthy is the author's apparent restraint in the matter of indulging in controversial opinions. This universal tendency was wisely eschewed in favor of parroting generalities and facts. Also to its credit, it is written in the simple style of our "Old Coach's Corner." Expert editing and proofreading would have improved it.

While its minor errors will amuse or irritate better informed readers, these mild mistakes will less innocently affect the green reader, for whom, ostensibly, the book was written. Unfortunately, he will believe such intimations as those represented by the following selected examples: the revolver is a "pistol"; there is a ".375 Magnum" revolver; the ".30 Government", instead of the .30 Army, is another name for the .30-40 Krag cartridge; the ".45-70-405", instead of the .45-55-405 is the old-time carbine load; there is a "Springfield Model-52 M1", etc. That is the worst which can be said about this book, and that is very little. It is essentially correct and has a mission of spreading among the uninformed that gospel in which we shooters believe, and that is enough to recommend its wide distribution.—F.C.N.

231 pages, cloth, illustrated, $1.98, Chemical Publishing Co., Inc., Brooklyn, N. Y.

ing full time (and overtime) in critical war industries, it was proposed to use two evenings a week for training. We expected a total of some forty-eight Navy personnel. But when Lt. Thomas announced the opportunity for training, more than 185 persons indicated a desire to enter the school! Within four hours, one WAVE had enlisted sixty from that service alone, collecting range fees in full from forty-five! Of the first twenty-eight offices contacted by Lt. Thomas, twenty-six wanted the course!

It took plenty of planning to take care of this unexpectedly large enrollment, but arrangements were finally made for eight two-hour sessions from Monday through Thursday evenings. The range provides six firing positions which, with the coach-pupil method, allowed classes of twelve.

Each of the groups—Officers, enlisted men, and WAVES—has shown great interest and excellent progress. The program of training used paralleled the NRA schedule for the first six classes, with training in the four positions and NRA qualifications. The seventh class is devoted to instruction and practice in rapid fire, prone and sitting; and the eighth class period is given over to firing Course F (Gallery), War Department Qualification. Each student completing the course receives the NRA Attendance Certificate and a special certificate from the Club certifying the score fired in the War Department Qualification. Special awards have been established for each Navy group, awarded to the Class Champion. A medal is awarded the Officer, enlisted man, and WAVE firing the highest NRA Qualification score in each group.

A special booth was operated by the Club during the American and Canadian Sportsmen's Show, to interest the public in the Small Arms Firing School program. This booth created a great deal of interest.

WAVES are enthusiastic shooters in Cleveland Small Arms Firing Class.

Although the N. Y. C. Rifle Club is one of the oldest in this section, the members feel that the Training School has been the means of putting the Club on the map. At the same time, the School has provided a means to make the members feel that they are performing an important war function over and above their regular work.

MEDALS WON'T HURT

Hingham (Mass.) Journal.—Copy of a letter written by Boris Demko to Herbert Walker from an Army camp:

Hi, Herb:

Today we shot for record, and I made sharpshooter. I also shot the Tommy gun and boy, what a honey of a gun it is! I got 22 out of 25 and that makes me a sharpshooter with the Tommy gun also. Boy, the rifle range at home sure helped me a lot with all the shooting I did there and the things I learned. Are you still going to the range? It will help you a lot when you get in the Army.

Chris didn't make sharpshooter but he did make marksman. Well, I guess we can bear to wear the medals!

WAR-BIRD HUNTER

A Prize surpassing even hunters' dreams was bagged by a youthful Marine during the initial Jap bombing of Dutch Harbor.

Pfc. Dick Fannett, who had learned to use a rifle shooting ducks on Old River, near Cove, Texas, and had perfected his marksmanship on a marine rifle range, was stationed in a foxhole armed with a 30-'06 rifle.

"I didn't have enough room to operate my weapon," he related, "so I climbed outside and started firing at a Zero only about 200 feet away. The Jap was attached to thirty-five waves of enemy bombers, each having six planes, that flew low to strafe us.

"I had eight shots and I pulled the trigger as fast as I could. I believe the fourth shot hit the gas line and killed the pilot. Anyway, the plane crashed right behind me, with an impact that knocked me flat.

"It was just like shooting at ducks with a .22 when I was a kid. I just happened to get in a lucky shot."

That the action was not officially considered luck is attested by the fact that Pfc. Fannett was highly commended and awarded a citation for his exploit.

IT PAYS IN THE NAVY, TOO

Wheeling (W. Va.) News-Register.—On his seventeenth birthday young Tommy Cronk enlisted in the U. S. Navy and after completing his boot training at Great Lakes, Illinois, was one of only six boys in his company to pass the tests for admittance to the Naval Air Gunner School. He attributes this fact to his training as a rifleman with the NRA clubs of which he is a member.

Tommy's training as a rifleman began at the tender age of five years when he became affiliated with the NRA in the junior division. As the years went by Tommy piled up an enviable record. At the age of thirteen he qualified with the NRA as expert rifleman. In 1940, at the age of fourteen and a half, he attended the Small Arms Firing School, at Camp Perry. In the National Rifle matches, immediately following this school, he placed first in three matches, second in two matches, third in one match and ended up by bringing home the national Whistler-boy trophy for which he set a new national record.

Tommy has a cigar box full of medals won in local competitions and just prior to his entering the Navy he received his commission from the NRA as Junior Assistant Instructor.

Upon arrival at the U. S. Naval Training Station at Great Lakes young Tommy, besides being placed in charge of his squad, was made company rifle instructor. When the day came for record firing Cronk set the pace by shooting the highest score, and his company which he had trained, won the rifle efficiency pennant for highest company score in the regiment.

If this is not concrete evidence enough to convince the most skeptical that War-Department-endorsed pre-induction training programs are of real value to the armed services and to the individual receiving it, then listen to this: Young Cronk's company commander told him that if he were only twenty-one years of age he would be eligible to a chief petty officer rating.

THE PAY-OFF

Private First Class George W. Peters, writing from Iran to Life Member Frank B. Hill, pays off in full in one short paragraph for all the trouble Hill took to teach him.

Hill writes: "I was on the pistol range of the Nashville Pistol and Revolver Club one morning in 1941 when this lad and two of his buddies came by. I found that this lad, Peters, was in an M. P. outfit. I spent the afternoon, and others later, endeavoring to teach him defensive shooting. The interest he showed was gratifying and worth all the effort it cost me. . . . Here's a letter from him, written many months later. I want it back! I prize that letter very highly!"

What Peters wrote, in view of censorship, was brief and lacking in detail. All he says is: "You remember the tricks you showed us? Well, they sure come in handy over here! I can assure you that if not for the knowledge of them I would have been 'laid up' more than once!"

Do you wonder that Hill prizes that letter? That is the coin in which NRA members are being paid for their work in making better gunners out of the boys who are "going". Have you got a pay-check coming?

DOPE BAG ☆ ☆ ☆ Conducted by F. C. NESS

THIS MONTH:

.22 Center Fire · Squirrel Varmint and Deer Loads · Home Made Bullets · Bullets from Fired .22 Cases · Bore Life Evidence · O'Neil Patented Load · .22 Long R.F. Accounted for · Combustion Discussed · Bull Pups for Officers · Trade Dope.

GENERAL PURPOSE LOADS

A favorable feature of the .22 caliber is the relative abundance of suitable barrels and bullets. None of these things are abundant today, strictly speaking, but as calibers go those of the .22 size are most readily available. I am thinking of reloadable ammunition which means center-fire. There are a host of such cartridges using the same bullets, both lead-alloy and jacketed, some adapted for big-size and others for small-size primers.

The smaller C.F. cases can be used with No. 1½ pistol primers, if necessary, and these latter have been available longer, or in greater quantity, than other primers. These are adapted for the .22 Hornet, K-Hornet, .218 Bee, Mashburn-Bee, and .22 Lovell. It happens that these small cartridges will do well in almost any .22 barrel, as long as it is in good condition and has a twist of rifling no slower than one turn in 18 inches. The groove diameter may be as small as .2225 inch or as large as .2265 inch, the ideal size being .2235 to .2245 inch.

For the larger cases which are adapted for large-size rifle primers the barrel supply is not as broad because these should have 12-inch, 14-inch or 15-inch twists and the groove diameter must be bigger than .223 inch, making even .22 Hornet barrels unsuitable or, at least, undesirable. The .224-inch barrels of the .220 Swift with their 14-inch twist are best for this group which includes the factory .219 Zipper, the .22 Varminter, the .22 Niedner and the .220 Arrow besides the factory Swift itself. If smaller barrels are used, sub-diameter .22 jacketed bullets must be used, that is, .223-inch or smaller. In a tight foreign Hornet barrel I had improved results with bullets smaller than .223 inch, and the best of all were some .220-inch 8-S bullets obtained through the cooperation of Charley Morse. I know of only two experienced experimenters who successfully use oversize jacketed bullets, or under-size barrels, both only in .22 caliber, of course. Both employ special chambering or throating to start their oversize bullets properly.

In the matter of jacketed bullets, also, the .22-caliber size has an edge in availability on other calibers, because the factory output has been eked out by such custom makes as the Sisk and Wotkyns-Morse. Grove Wotkyns makes his own, or has them made, from factory rim fire blanks. Others are doing the same thing with fired rim-fire cases. Many different lots have been received as samples from as many different sources. Usually, the accuracy is quite satisfactory, but not fully as good as that obtained with standard Sisk, W-M or factory jacketed bullets.

Recently, J. W. Hornady, 624 S. Monroe, Grand Island, Nebraska, has undertaken to supply such .22 jacketed bullets made from fired rim-fire cases by his associate, Mr. Speer. They are made in several weights using copper, brass and plated rim-fire cases for jackets. The samples we received weighed 48 grains, and they were tried in the .22 Varminter with heavy and medium-power loads. Again, the accuracy was not up to the standard of the rifle, but satisfactory. Only a few were tried at 100 yards, 80% of those fired going into less than 1½ inches. The biggest 5-shot group was 2.33 inches and that had four in 1.18 inches. Hornady, himself, reports getting his first one-inch group with these bullets, with 8 shots in 9/16 inch. Many other groups would have been as small, but for the usual pair of fliers. In an elevation check, Hornady got one 5-shot group at 200 yards in 1 9/16 inches, using these fired-case bullets.

At the end of June, Hornady reported 25,000 of these bullets on hand with enough jacket material to make 100,000 more, and the expectation of turning out 50,000 bullets in July. He is offering 15 cents per pound for fired cases in .22 Long Rifle caliber. Although they are swamped with orders already, he expects their production will catch up before too long. Let us hope so.

Henry E. Payne of Dunbar, West Virginia, who has tried such bullets, praises Wilson's work and his .220 Arrow on the .220 Swift case. After 1100 rounds, a throat cast showed erosion extending less than ¼ inch into the lands, which is the usual condition of the Swift after about 300 rounds. Out of 120 reloaded cases only 8 have developed split necks after firing them nearly 20 times. Payne reams his necks every time and trims only when necessary as all of them do not stretch. His M-70, .220 Arrow has a 30-inch Winchester heavy barrel in a Winchester target stock. On it he uses a 1½-inch, 12½X Fecker scope for crow shooting.

From bench rest, Payne shoots at 105 yards and uses a 1½-inch, 20X Litschert scope. I have seen and measured a number of his consecutive groups made with different loads. His Winchester Bull Gun in this .220 Arrow caliber apparently shoots well with a number of different loads when good bullets are used, with the exception of the 60-grain weight. The Sisk Niedner and W-M 8-S 55-grain bullets with 36½ to 37 grains of No. 4320 showed 5-shot groups of ⅝, ⅝, 17/32, ½, ½, 19/32, ⅝, ¾, 15/32 and 9/16 inch. The only 10-shot group ever fired in this .220 Arrow measured under an inch with 9 shots in less than ¾ inch. This load was the 55-grain Sisk with 36½ grains No. 4320. Even 25 and 30 grains of No. 3031 did well behind this bullet with groups of ⅞ and 11/16 inches. The 55-grain Express made a nicely bunched group of 15/32 inch. The 45-grain 8-S with an overload of 38 grains No. 3031 gave groups of 9/16, ¾ and 7/16 inch. Rejects or deformed bullets were tried separately and gave groups of 1 1/16 and 1 5/16 inches. Some 50-grain bullets made from .22 cases were tried with 39 grains of No. 4320 and showed no tendency to pile up or bunch, but gave an even spread of 1⅞ inches; not as good as the rejects.

At velocities of 3000 f.-s.m.v. and above the light little .22-caliber jacketed bullet seems to fill the bill in varmint shooting. Because the bullets and powder charges are relatively light it is most economical. It is possible to get this velocity in the K-Hornet with the 50-grain 8-S bullet, but it is better to use the 47-grain 8-S or the 45-grain 8-S in this small case. In the 2-R Lovell the 55-grain Sisk Niedner bullet can be used in a 16-inch twist with a case full of No. 4198 for varmint shooting up to 250 yards on crows and to 300 yards on chucks. In the regular Hornet or .218 Bee lighter bullets (the 35-grain Sisk and 40-grain Sisk, respectively) can be used for similar velocities over ranges a hundred yards shorter.

In the middle group, comprised of the .22 H.P. Lovell, Donaldson Wasp, Improved Zipper, Bluestreak, etc., the Sisk Express or W-M 8-S 55-grain bullets can be used in 14-inch twists, or even the 41-grain Sisk or 40-grain 8-S bullets at 4000 f.-s.m.v., for 300-yard chuck shooting. Just above these we have the .22 Varminter, .220 Arrow and .220 Swift, with Miller's Magnum creations and his .22-.348W providing still higher velocities. Ernest Baldwin's theory is that the striking velocity must not be less than 2000 f.-s., (and I think 2200 f.-s. would be still better) at the point of impact to obviate ricochets. He suggests that, according to the load used, a range restriction (self-imposed) should limit the shooting to those distances at which the remaining velocity will be at least 2000 f.-s. Incidentally, his Bluestreak is 2 1/16 inches overall and 1⅝ inches from shoulder to rim.

Hervey Lovell's new .22 H. P., for which case he has made ten rifles, will hold 40.6 grains No. 4320 against 42.6 grains capacity for the .22 Varminter similarly filled. The shooting load is 36 grains behind a 63-grain base-band bullet. That means it would be not over 34 grains behind a normal 60-grain to 65-grain bullet, and probably less. The bore diameter is .218 inch with .224-inch groove and a 14-inch twist. With 36.3 grains behind the 50-grain 8-S bullet he reports an inch-size group at 200 yards; probably 5 shots. This new case is about 2 inches long, straighter in the body and about 3/32 inch longer in body and overall than our own .22 H.P. Lovell. The new Dr. Mann type bullet is not quite ¾-inch long (about .720) and its forward section is bore size, or .218 inch, with a .224-inch base band. He plans to supply all comers after the war.

An interesting comment about Lovell's old .227 Niedner on the .32-40 case was that Niedner's 60-grain base-band bullet with a hot load of 19 grains Lightning did not dull the lands of the .226-inch Winchester .22 W.R.F. barrel which remained spotless after 4000 rounds. That load in that case probably developed at least 2700 f.-s. with the 60-grain base-band bullet. In this barrel-life connection, Byron Cottrell wrote me on July 11 this year that he had just examined Harvey Donaldson's 2-R Lovell (this was the very first rifle of this 2-R Lovell breed and of the second shape of reamer made for Donaldson by Risley and hence called the No.

2 Risley case or 2-R Lovell) after it had been fired 8000 times. He said it looked perfect and quite free of streaks in the grooves or other signs of erosion.

Oddly enough, Donaldson's load is exactly the same as that used by A. R. Weeks whose 2-R Lovell liner was reported ruined by considerably less shooting (4600 rounds) in my July Dope Bag article on barrel life. The reason, Donaldson says, is a combination of his undersize grooves, loading and special throating. We hope to divulge Donaldson's dope on this in an early issue. It is a .223-inch Savage-Hornet barrel, now in use for ten years in both calibers, and with .224-inch bullets. It has a 16-inch twist and the load is 16 grains No. 4227 behind the 45-grain 8-S bullets with Donaldson's home-made graphite wads. This should scotch the rumored erosive action of graphite wads.

Lain Foster of Bloomington, Ill., has tried out two things thoroughly and with pleasant results, (1) the .22 Varminter and (2) the Lee center-dot reticule. Foster suggests that varmint shooters handload full-patched .22-caliber bullets to 2000 or 2200 f.-s. for their varmint rifles and use them for squirrel hunting up to 200 yards. I would suggest that in some unsettled regions, or against hillsides, even the full-power chuck load or crow load would also be practical for this purpose if only head shots are taken. While the .22 varmint rifle is not to be recommended as a deer rifle, it can be successfully devoted to that purpose in still hunting by varmint shooters who can place their bullets at will up to 300 yards. When that is done deer and antelope may be neatly bagged with greater surety and more mercifully than with the regular deer rifles in regular jump shooting. However, the small swift varmint bullet is not the one to use on running game, although it is the correct medicine for running jacks and coyotes.

COCKING-PIECE KINK

R. Starn of Raymond, Washington, suggests the following stunt, in his own words:

"It is very easy to put a cocking knob on the Enfield similar to that on the Springfield. True the cocking piece in the lathe chuck and turn down slight shoulder ⅜ inch from end, diameter of No. 27 thread, pipe tap. Then turn and bore a piece of mild steel to fit the tap and drive tap in gently with tail stock center. Thread turned-down shoulder on cocking piece same as middle of tap. This does not weaken cocking piece. Mine turned out very satisfactory."

LEAD-ALLOY KRAG LOADS

C. E. Phillips of Bell, California, says it is imposible to obtain jacketed bullets for his Krag carbine, and that he has to turn to plain-base and gas-check bullets made from his home-made molds. One 195-grain gas-check is $\frac{1}{16}$ inch longer than Ideal No. 321297 and has the same seating depth as the 220-grain factory bullet. He uses these solid bullets sized to .310 inch in .309-inch case necks belled to .311 inch at the mouth. Function through magazine and chamber and accuracy is OK., he says.

This hunting bullet was seated without crimp and the F.A. No. 70 primers were used with various charges of HiVel No. 2 and S.R. No. 4759. Testing was done with peep and globe sights at 50 yards, in 3-shot groups. The best load brackets were: 20 to 22 grains HiVel No. 2 and 16 to 18 grains No. 4759. With the former powder, 20 grains gave $1\frac{1}{16}$ inches; 21 grains, $\frac{15}{16}$ inch; 22 grains, ⅞ inch; 23 grains, $1\frac{5}{16}$ inches; and 24 grains, 1⅜ inches. With No. 4759, 14 grains gave 2⅜ inches spread, including the first shot (from a cold and oiled bore) which went low right; 15 grains gave $1\frac{9}{16}$ inches; 16 grains, ⅝ inch; 17 grains, 1⅜ inches; and 18 grains, $\frac{9}{16}$ inch. After the test and without bore cleaning, Phillips fired his target load consisting of the W.C.Co. No. 7 pistol primer and 11 grains Unique behind his 170-grain Pope type plain-base bullet. This group measured $\frac{13}{16}$ inch.

WHY THE .22 LONG?

Most shooters eschew the .22 Long which is the .22 Short bullet in the .22 Long Rifle case. In fact, many of us wonder why it is made at all. Paul St. Gardens of Windsor, Vermont, has offered one explanation, blaming it on the Colt Lightning repeater, which rifle can handle the .22 Long, but is not adaptable to the .22 Long Rifle cartridge. There are thousands of these repeaters in use, particularly among the "Indians and Esquimeaux of Canada and Alaska," says Paul, which keeps the demand for regular .22 Longs alive. He adds that the sketchy breech-block support of these C. L. repeaters precludes the safe firing of modern high-velocity loads.

O. K. H. DUPLEX PATENT?

Carroll R. Irons, Research Chemist and Patent Attorney of Midland, Michigan, informs us that U. S. Patent No. 2,269,316, dated January 6, 1942, was issued to Charles M. O'Neil of Hopkins, Minnesota. Anyone interested can obtain a copy from the U. S. Patent Office for ten cents. We had been informed of this previously by E. Baden Powell and obtained a copy shortly before hearing from Mr. Irons.

It covers "Chamber Efficiency" and a means of loading and firing a case filled with powder and equipped with an extended flash hole leading to the middle of the charge which latter completely fills the powder space to the base of the bullet. While Mr. C. M. O'Neil, the patentee, is the same one who is identified with O. K. H. Duplex loads, we are not definitely informed this patent is the long-bandied and much-discussed one, but we assume that it is "nothing else but". See our reference to this on page 43 of The American Rifleman for August, 1943.

CANADIAN WILD-CAT

From Vernon, B. C., F. C. Simmons sent us a sample of his wild-cat cartridge on the .22 Hi-Power with a sharp shoulder and a short neck. The neck is ¼-inch long; the body to shoulder, $1\frac{7}{16}$ inches; the case 1¾ inches; and the cartridge overall, $2\frac{5}{16}$ inches. The neck is about .250-inch diameter; the shoulder, .375 inch and the head .4305 inch. It is on a Winchester S.-S. action with a heavy barrel and 16-inch twist and shoots all bullets from 35 grains to 63 grains with excellent results. Simmons gets fair results with his jacketed bullets home-made from fired .22 cases.

One light load is a 53-grain bullet and 23.5 grains of No. 4198 for good results on crows and chucks. The 35-grain bullet does no better than 2⅛ inches for 10 shots, and a home-made 63-grain double-jacket averages 2 inches spread with 30 grains of No. 3031. Sisk 55-grain bullets, however, with as much as 30 grains No. 4064 give inch groups at 100 yards. Even the hottest load shoots to the same point of impact as all the others. Simmons says he has not altered his scope sight zero with any load since he first sighted in.

Simmons tried some 40-grain bronze bullets with a case full of No. 3031 and got 4 x 5 in an inch at 100 yards. He has no idea of the velocity, but thinks it is very high. These bullets do not group at all with 16.5 grains of No. 4227 in his Lovell rifle. The throat remains intact and the bore shows no appreciable wear after 900 rounds, of which more than 50% were below maximum loading. His fifty cases have needed no trimming to date and only two of them have developed split necks.

.22 GAS CHECK CHUCK LOAD

Alton T. Smith, of LeRoy, N. Y., has killed more than 100 chucks this year with a hollow-point, typemetal bullet and a .225-inch gas-check base made of old automobile head gaskets with a die fashioned by a machinist friend. Ipco grease wads were also used with the load of 10¼ grains No. 2400 in Super-X cases for the K-Hornet, fired with No. 1½ pistol primers. The rifle is a Model-19 Savage equipped with 8X Fecker scope sight. The sample 5-shot group, fired from bench rest at 100 yards, was not small but adequate for chuck shooting.

HOME MADE .375 MAGNUM

Lieutenant Roy D. Hughes of Bremerton has found time to make reloading tools, powder scales, micrometer sights .22 target pistols and military-type projectiles. He sent us a photo of the .375 Magnum rifle which he built on the M-1917 action using a Dubiel barrel blank. It weighs 8¾ pounds, but the buttstock is very high and straight and long to modify the recoil effect. The forestock has a graceful taper ending in a long slender tip. He hinged the floorplate and fitted a safety catch, the magazine capacity being cut to four rounds. The Circassian walnut stock is made full floating in front. It is checkered. The action is engine turned and the barrel is engraved, everything being the work of Lieutenant Hughes, including the sights. The comb drop is only 1⅛ inches and Hughes says it gives "considerably less recoil than the M-70 Winchester", in the same caliber.

THE COMBUSTION CHAMBER

When smokeless powder first made its appearance on the rifle ranges many years ago, it was found that many of the existing cartridges could not handle it properly. Accuracy suffered and some condemned the new smokeless and semismokeless powders and questioned their advantages. In many cases it was the shape of the cartridge case that was to blame, since they were comparatively straight walled and intended for use with the instantaneous burning black powders. The .50-70, .45-70, .25-21, .25-25, .32-40 and .38-55 are good examples of the straight-walled type of cartridge. They all had a very slight taper to facilitate easy extraction.

When some of the target shooters began to use the new powders in combination loads there was an immediate improvement in accuracy as the burning efficiency was improved. By using booster charges and priming charges, the riflemen were able to insure a more even and efficient burning of the entire charge and the variations in pressure and velocity were banished. The result was a distinct improvement in accuracy and power.

The "bottleneck" smokeless cartridge then made its appearance. It was designed specifically for the new type powders and had the familiar tapered shoulder found on the majority of our present cartridges. Smokeless powders are progressive burning; they burn at a slower rate than black powder and as the powder is consumed a constant pressure is applied to the base of the bullet.

As the primer flash ignites the charge, some of the powder at the forward end of the cartridge case is forced into the bore by the pressure from the rear. Some of this powder burns on its way down the bore and some unburned grains leave the muzzle behind the bullet. This is to be expected. The ideal way would be for the entire charge to burn within the cartridge case and to have only the effective propellant gases pass through the bore. The shoulder of the cartridge case helps to retain the powder within the cartridge case during its combustion. It also helps to deflect the hot swirling gases on the remainder of the powder charge and complete its combustion. This turbulation is highly important in cartridge efficiency.

It is highly desirable to burn the entire charge at a uniform rate of speed so as to gain the maximum of power. If the powder burns too slow, much of its power is wasted after the projectile leaves the muzzle. If it burns too fast the charge is consumed and its pressure begins to drop before the bullet has left the bore. The violent swirling action of the burning gases within the cartridge case during combustion can be called "combustional turbulation."

It would be fine to be able to ignite the charge at the forward end of the cartridge and thereby burn the charge from the front to the rear. In this way no powder would leave through the bore and a higher burning efficiency would be achieved. Numerous experiments have been tried to achieve this action, using ignition tubes and similar devices and these experiments are being continued.

The recent trend toward odd-shaped cartridge-case shoulders and the "sharp shoulder" types is due to the desire to control and regulate the powder gases and thereby achieve the ultimate in combustional efficiency. The modern cartridge designer seeks to gain the most from each load. Only by close observation and careful planning can he hope to extract the maximum of power, from the minimum of powder. In some of the more recent designs, R-2 Lovell, K-Hornet, .255 Dean and others, we find small cartridges delivering high-powered ballistic performance and doing it with relatively small charges of powder. These cartridge cases were designed to gain the greatest possible power from the propellant gases by controlling their action during combustional turbulation.

When using a given powder the gas pressure builds up within the chamber and bears a constant pressure on the base of the projectile until it leaves the muzzle. The force of this pressure varies with the speed at which it is built up by various types of powder, according to the burning speed of that particular powder. When the burning rate is too fast the pressure may soar to dangerous levels before the projectile leaves the muzzle. Such excess breech pressure is only wasted power and very dangerous power at that.

The ideal way to propel a projectile is to "shift gears" just as you do in an automobile. You must start it in low gear and speed it up in successive stages until the maximum possible speed is achieved. This is the basic principle involved in the so-called "Duplex" method of loading. The idea is to ignite a slow burning powder which starts the bullet into the bore with a minimum of deformation and then have successive charges of faster and faster burning propellants keep the bullet under a constant acceleration until it leaves the bore. It is easy to see that such a constant flow of ever-increasing power could impart a terrific velocity to the projectile. There is yet another method of achieving this end and that is by using a single powder having a multiple coated grain. As the outer, slower burning coating burns off the powder grains, it exposes second and third layers of progressively faster burning powders which accelerate the projectile.

Such are the points which the designer must bear in mind in his attempts to create rifle cartridges of greater efficiency. After the bullet has left the bore he has new problems of balance, retained velocity, and gyroscopic stability, all of which I will attempt to describe in a later article. See page 44, May, 1943, Dope Bag.—Harry O. Dean.

TWO BULL PUPS

As time goes on we will probably hear more and more about rifles of McCrea, Buhmiller and Albree persuasion, which type Doering dubbed the "Bull Pup." These short, compact, long-range guns may be concealed and conveniently swung about in cramped quarters, such as a car, and very likely some day they will become popular among law enforcement officers. Powerful long-range cartridges may be used in long barrels, or in those of normal length, and yet all the handiness of a short gun is provided in this Bull Pup design, because the buttstock does not project beyond the receiver tang, which saves about a foot of overall length as compared with conventional rifle design.

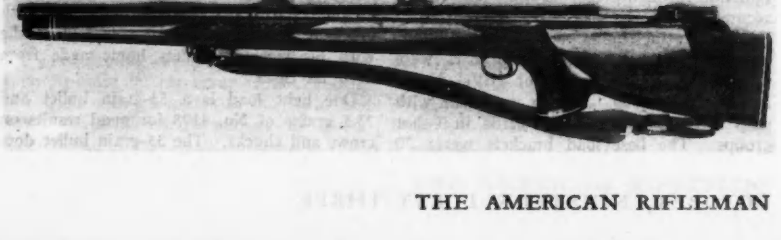
With the buttstock under the bolt, instead of behind it as is customary, there is no comb and no drop. The cheek must be rested on top of the receiver at approximately the location of the hood and barrel breech. This means either Grove Wotkyns' idea of a rhomboid prism or Norman Albree's idea of a prism peep sight must be used to bend the line of sight in order to meet the eye position about 2 inches above the bore of the rifle. The alternative is to use a high-mounted scope sight or a high-mounted tube sight or high military sights, front and rear, as in the case of the Johnson Carbine and Light Machine Rifle, which pair also presents this same sighting problem.

There is an advantage in the high sight line, because heat waves have their adverse effect on sighting somewhat modified at this distance from the heated barrel. More important is the advantage in practical long-range field shooting afforded by the sight line when it is 2 inches above the bore. The top arc of the trajectory can then be utilized to bring impacts all along the line that much nearer the line of aim and the apparent or practical trajectory becomes flatter. For example, the on-aim impact at 100 yards will be 2 minutes of angle above the bore line instead of the single minute of elevation which is usual with low sights. Thus the problem works out well enough and leaves only the disadvantage of the projection nuisance common to all high sights.

Some shooters object to placing their faces over the chamber as is required in aiming the Bull Pup. They argue the danger which would attend a blow up of an overload with the cheek and face in this vulnerable position. As a matter of fact, the head and hands are always vulnerable to injury when a rifle is wrecked by an overload. When a case ruptures near the head or when a primer is pierced and gas comes back into the action and along the bolt races there is danger of getting powder grains and brass fragments in the shooter's face below his eye-shielding goggles. This is where the Bull Pup has it over the conventional rifle, because the dangerous escape point at the rear end of the bolt is behind and beyond the face instead of directly in front and in line with the face as is the case with conventional bolt-action rifles. I have seen some bad smears made with standard factory loads in standard rifles, and we encounter an average of one such accident per year in our shooting; never so far with any handload or wild-cat, it happens.

The designer and builder of Bull Pups has an inescapable trigger problem, because he must locate it to accommodate the trigger finger instead of the action or the sear itself. That means using a long rod to communicate the trigger movement up in front to the action mechanism some distance to the rear. Some of these Golberg arrangements have been ingeniously worked out by the different gunsmiths. It was very cleverly met by E. C. Bishop & Sons in the Bull Pup they built for the Dope Bag last year. That mechanism will be described in a separate article if the makers permit. In brief it is a regular trig-

RUTZ' BULL PUP BY CHARLES FAJIN



ger in normal position connected (by a long double rod) to the auxiliary finger trigger up in front. The release is short and clean, but for our matches the weight of pull must be three pounds.

This N. R. A. rifle was a special heavy barrel .22 Springfield purchased several years ago when they could still be had through the D. C. M. It had a long 30-inch target barrel. It was sent to Bishop for a Bull Pup stock and a complete job. The design is neat for this type of rifle and the Bishop gunsmith showed his skill in the excellent workmanship performed on same. The stock is free or floating to the muzzle. Our purpose was to try the peculiar advantages of the Bull Pup in balance and holding for the offhand positions of 4-position gallery target shooting. It fills the bill admirably, as is to be expected of any Bull Pup rifle, particularly in the standing position. It is a long pup because metallic sights are mandatory in some matches. It weighs a full 14 pounds. The problem of the essential high sight line was met by getting and fitting abnormally high bases for aperture front sight on the muzzle and for the Lyman tube sight on the barrel. These are shown in the photo.

The other picture is of a Bull Pup built by Chas. J. Fajin of Stover, Missouri, for Wm. C. Rutz of Valparaiso, Indiana. The barrel (1 3/16 x ¾) and chambering was by J. R. Buhmiller of Eureka, Montana. The metal work and trigger installation was done by Fajin. He used a Model-70 Winchester trigger as was done by Bishop on our Pup. Rutz says the work is wonderful and the pull is good and short, but has more perceptible movement than his L. G. Thomas trigger on his 52 Winchester. The barrel does not touch the stock anywhere and the front band is very loose. With scope and sling as shown it weighs 18 pounds and 10 ounces.

In its .224-inch barrel (12-inch twist) Rutz uses 55-grain to 63-grain bullets. His most accurate load is 28 grains of HiVel No. 2 with No. 8½ Western primers and the 55-grain Sisk Express. Nickel-size groups are common at 150 yards and he has had 5 shots as small as a dime at that range. The case is the one T. K. Lee used and among other names it has been called the McCrea-Doering Hi-Power, as Lyman McCrea made the original dies and chamber for Doering.

ANY CARTRIDGE

Any cartridge containing powder is potentially dangerous, although it will require very high heat to ignite it. When it also contains a live primer it should be treated with greater respect and handled with care, because the primer contains the potential heat necessary to ignite the powder and it, in turn, may be detonated by a blow or by heat. Loaded ammunition can be handled safely under normal conditions, but when heat or pressure or shock are involved the primer and powder should be removed, as they always represent potential danger under the conditions mentioned. For example, reloaders size and trim cases before the primer is seated.

STAR-GAUGED BARREL

A star-gauged barrel is one which has been measured inside, as was done at Springfield Armory using their star gauge. This gauge has projections or points radiating from a common center and controlled by a micrometer sleeve so that every inch of the bore can be measured. The term is applied to those barrels which pass the standard inspection and this measuring test for uniformity within the maximum and minimum tolerances permitted in the manufacture of these barrels. In other words, a star-gauged barrel, as commonly used, means a barrel selected through interior measurements, of bore and groove diameters throughout.

TRADE DOPE

Stoeger Catalog No. 35 ready. I was surprised this spring to learn that Stoeger Arms Corporation were compiling and assembling data, cuts and material for a new edition of their big general catalog for shooters. On my recent trip to New York I dropped in at Stoeger's 5th Avenue shop to say hello, and to ask about the progress of the new book. When I returned to Washington I found a beautifully bound, gold stamped, personal copy on my desk. That represents an advent these days.

It does not seem as fat as formerly, but it is still the same formidable volume of 512 pages of the usual size, or about 8 x 10 plus included fractions. Perhaps it is merely compressed more than before using thinner paper in suitable places on account of the war. For all that it is dressed up gaily here and there with color plates, sixty pages altogether and 8 of these in four colors. Twenty of the embellished pages deal with guns, stocks, accessories and Stoeger's own brand of shooter's products, the remaining forty color-dressed pages comprise the new expanded book section covering practically every field of non-fiction likely to interest sportsmen, nature lovers and military men. These are grouped by subject, each page having listed too many different titles to permit enumeration.

The arms and ammunition listings are retained, but the sale of the latter, of course, is restricted by WPB limitation order No. L-286, as is prominently mentioned in the catalog including a sample "application and order for ammunition" with explanations. The sight section, police equipment, hunting and camping goods, and firearms parts are included as of yore. The gunsmith section on tools and material has some new items; notably several types of steel in different forms and sizes including cold drawn and tool steel, spring steel and spring wire, square and round drill rod. New to me are the listings of games for sportsmen and Servicemen and reproductions of outdoor paintings, wall panels, trays and mottoes.

Chortle. A Western-Winchester release from Steve Hannagan on the M1 Carbine cites the interesting fact of its failure to function until the original gas port had been enlarged .013 inch, the pilot model port being .06 inch to start with. "That mere *hair* of a hole, it was decided, should be enlarged," says the release (our italics). Steve overlooked the fact that "hair"-sized hole was practically 1/16 inch, whose decimal equivalent is .0625. Could be some monstrous animal (probably pre-historic) with true hair (not bristles) that thick? No heckling intended.

Another interesting quotation from the same release says, in part; "Since the Carbine is nearly four pounds lighter than a Springfield or Garand, and a hundred Carbine cartridges weigh less than three pounds, a Carbine soldier can carry 420 cartridges and still carry no more weight than one armed with a Springfield and carrying only 160 rounds of ammunition. Those 260 extra rounds can be the difference between life and death to a fighting man."

Granting the probable accuracy of Steve's analysis and conclusion, it happens to be at least equally true that one bullet of A. P. or M1 persuasion which completely penetrates a bunker, log or cocoanut tree with an enemy sniper behind it is far more efficacious in saving our soldier than a magazineful of Carbine loads which fail to perforate that same protective shield.

* * *

Catalog No. 2 of the Roslyn Gun Shop was received from Thomas Woroniecki, 47 West 44th Street, New York City. Neatly stapled and fully illustrated by line drawings from Francis Withopf, Jr., this 5 x 8 book, of 72 pages, lists antique firearms, cutlery and insignia, cartridges for collectors, accessories and kindred items for sale with prices. There are bombs and grenades, daggers, trench knives and bayonets, many of the latter suitable for throwing. The book costs four bits.

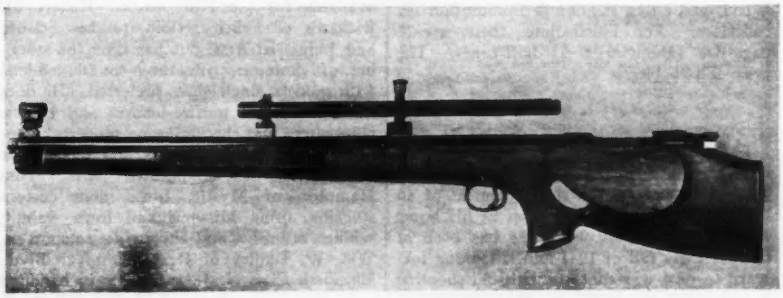
* * *

Sports, Inc., of 2850 N. Clark St., Chicago, is what has become of our old friend, Paul VonFrantzius, importer of Oigee scope sights among other importations, including pistols and rifles. This went on full swing from 1921 to 1930 as a specialty. Now the firm is featuring the well-known Franzite grips for handguns.

* * *

Al Freeland, manufacturer and seller of popular shooting accessories, is still at it in so far as war needs permit. A note from him says he has now added expert bluing as a service to shooters.

BISHOP-NRA .22 GALLERY BULL PUP



FOR THE SHOOTER BY A SHOOTER
Yours for Peace in '43
—EXPERT RIFLE & PISTOL BLUING,
prices on request—
FREELAND ARM CUFF AND CLASP.... $2.50
FREELAND Khaki Slacks, finest quality.... 4.50
Wesnitzer Primer Pocket Cleaner.......... 2.50
Wesnitzer Inside case cleaner.......... 3.00
Randle Sling Keeper.......... .75
Merit Master Disc for your rear sight....... 4.00
Jostam Rifle Cheek Pads.......... 3.50
Dr. Nelsen Ear Stopples (glass).......... 1.00
FREELAND 65MM Scope Cases.......... 2.75
SPORT JACKETS, first quality........$5.95 7.95
GENUINE TEXAS RANGER BELTS........ 2.50
Padded rifle cases..........$5.50 6.50
Hard Leather Rifle Case.......... 22.00
MURAD PISTOL GRIPS, blk., brown & ivory 3.50 up
—FULL LINE OF RED HEAD HUNTING & FISHING PANTS, COATS, SHOES, ETC.—
YES, I'LL BUY OR TRADE GOOD EQUIPMENT
Catalogue Free Courtesy Assured
OFFICIAL N.R.A. TARGETS
AL FREELAND, 1112 35th St., Rock Island, Ill.

Leather Wears Better
Treat your leather gear regularly with LEXOL, the self-penetrating conditioner. Easily applied to boots, shoes, jackets, gun cases, etc.
LEXOL keeps the leather supple and strong—leaves no residue to soil clothing or catch dirt.
Sold by sporting goods, department, shoe and luggage stores, or send $1 for pint; $4 for gallon.
LEXOL
863 Summer Ave. Newark 4, N. J.

DON'T MONKEY WITH SUBSTITUTES...KEEP GUNS RUST FREE with RIG
No RIG shortage!
No Change in RIG Formula
Tube 25¢
¼ LB. Can 50¢
END GUN RUST WORRIES—Same pre-war ingredients keep RIG the finest rust preventive available! Gun experts say a 2 min. app. inside and out after day's shooting stops ammunition, fingermarks, sea spray, rain, etc., from damaging guns. RIG also protects knives, traps, tools, anything that rusts! At gun dealers!
RUST INHIBITING PRODUCTS
5836-R Stony Island, Chicago 37, Ill.

FISHING TACKLE
CASH FOR ENTIRE SPORTING GOODS STOCKS. Send inventory.
Warshal's Sporting Goods
FIRST & MADISON SEATTLE, 4.

John W. Smith of Runnemede, N. J., has submitted his price list No. 23. This is a 36-page catalog of antique and modern firearms, bayonets and swords, miniature and model cannon, war relics, old books and documents, powder horns and flasks, moulds, barrels and parts, sights and ammunition for collectors. For illustrations there are 7 page-size (about 6 x 9) half-tones. The price is two bits.

* * *

L. G. Thomas, designer of the well-known trigger mechanism bearing his name, is very busy these days as the superintendent of an Ordnance tool and gauge shop in his home town of Shreveport. Thomas has been at it since early fall of 1941 and is looking forward to post-war contacts with old shooting friends and an expansion of his gadget business with new and improved products for shooters. Thomas is fortunate in that he loves his war work and the fact that he has applied himself to it without stint is attested by a letter of high praise, which I have seen, from those in charge of the Ordnance plant which benefits from his ability and diligence. Thomas informs us our friend, smallboresman W. H. Womack, who is his former Shreveport trigger-associate, is very busy in charge of shell and projectile manufacturing for another Shreveport firm. L. G. Thomas springs from a long line of gun makers and tool makers dating back to 1800. He finished his own apprenticeship with Pratt & Whitney as a tool and die maker back in 1920.

VAVER
DIAL MICROMETER SIGHTS
for all Rifles
Buy War Bonds Now—Buy Vaver Sights Later

* * *

Converter Steel Cartridge for firing subloads having the same bullet diameter is the idea of Ralph Engel of Ida, Michigan. He has made a steel case for my Gebby-Varminter which has a removable head so that K-Hornet and regular .22 Hornet cartridges can be fired. He is making another for shooting 2-R Lovell handloads in the same Varminter rifle. No chance to try it yet, and results will be reported when we are ready to review the gadget.

* * *

Gunsmiths. A word of praise for A. L. Knight of Fort Worth, Texas, has come in from one of his satisfied customers. He did a beautiful job of altering a Springfield bolt and delivered it in two weeks. We know Knight personally and can recommend him. Another recommendation has come in for Charles J. Myers of Bluffton, Indiana, on the strength of a "beautiful" job on an Enfield Sporter. Also Clarence A. Hill, 1616 W. 2nd St., Dixon, Illinois, is highly praised on .22 C. F. work.

Continuing our listing of currently active gunsmiths: Gene Spencer, 1179 Western Ave., Hollywood, California, can repair and make small parts as well as stock, providing scarce materials are furnished by the customer. Paul Dodge of Yreka, Calif., is still active as a specialist at all kinds of small-bore work, including tuning up target rifles. He prefers to do metal work (on barrels, chamber, ignition, trigger, etc.) because stock work takes too long for the spare time which he has available for gunsmith work. Robert M. Richards of Felicity, Ohio, teaches Science and Industrial Arts, but has time for stocking of shotguns, rifles and muzzle-loaders, with modern single-shots preferred. He does metal inlays on muzzle-loaders and combs, cheekpieces and checkering on moderns. Repairs set-triggers and locks and replaces or rebuilds the less-complicated parts. Tom Hampton of Mystic, Iowa, does custom stocking, using Missouri and Iowa walnut, reblues, refinishes and alters rifles to sporters. Wm. W. Dudley of R. 2, Westover Blvd., Elizabeth City, N. J., specializes in handgun work. Repairs, refinishes, restocks and makes custom stocks for all handguns. Does specialties on .22 autoloaders. W. H. Shackelford, 1734 Chanslor Ave., Richmond, Calif., makes most kinds of rifle stocks, including ivory inlays and trimming if desired.

* * *

Gun List of 10 printed pages has been received, of T. J. Cooper, R. 7, Meadville, Pa., half of which are devoted to Kentucky rifles and muzzle-loading shotguns, the balance to cartridge arms, military arms, handguns and miscellaneous items. His terms are cash with order, weekly express shipments, or prompt parcel post when postage is advanced. The packing cost is also borne by the customer.

* * *

Butler's Gun Repair Shop of Poultney, Vt., said nothing about its own service but praised the ingenuity of clockmaker Charles A. Smith of Brattleboro, Vt., who is now past seventy. He is an enthusiastic chucker with the .22 Lovell and makes powder scales and loading tools of rock maple, on the straight-line principle. Of course, the pins, plungers and dies are of steel. His maple chuck rest or shooting stick has a hooked end for pulling 'em out of their holes. Floyd Butler says he has used Smith's balance for three years. It is designed to come to rest quickly for weighing each load without undue delay.

* * *

Industry Notes. Savage Arms Corporation completed their millionth submachine gun in June this year. The St. Louis Ordnance Plant had made more than two billion rifle and machine gun cartridges by the end of July this year. The announcement said 200 operations per cartridge and 90 inspections are involved. The plant is operated by W. C. Co. through its subsidiary, U. S. C. Co. Harry C. Howland, factory manager of the Ithaca Gun Company, was cited by the Chief of Ordnance for meritorious war work with several others who collaborated in the development of a stamped trigger for the .45-caliber Service side arm. Claude Parmalee, exhibition shooter for Winchester, is doing his stuff in Army camps these days and with the M1 Carbine and M1 Garand. With the latter he hits a flying can 3 times and with the carbine he can hit 'em 5 times at a throw.

* * *

Remington Range, 600 yards long, has been completed at Bridgeport, Connecticut, for testing .30-caliber-rifle and .50-caliber-machine-gun ammunition manufactured in the R. A. Co. ammunition plant there. This completely enclosed structure is an experimenter's dream come true. The concrete walls are 15 inches thick, and the inside space is 15 feet wide by 12 feet high. It is not only the biggest or longest indoor range in the country, but three times as long as its nearest competitor which, to our knowledge, is 200 yards long. It is sound-proof and ventilated and well illuminated. The butts are lined with 1-inch steel plate and filled with 40 feet of sand. This ends in a concrete wall 2 feet thick which is backed on the outside by 40 feet of earth.

* * *

No Ammunition for sporting purposes may be purchased in Canada, is the warning issued by Canadian Industries Limited for the timely information of American sportsmen who may be planning a trip across the border.

THE ARMS CHEST

THE ARMS CHEST is an open market trading post where manufacturers, dealers, professional gunsmiths, and our own readers may advertise their goods and services to fellow sportsmen at a modest cost.

Returns are uniformly excellent—scores of advertisers report truly phenomenal results.

The rate is ten cents per word *including name and address*, minimum charge $1.50.

Groups of figures are counted as one word, also usual abbreviations made up of single characters or initials. Hyphenated words are counted as two.

Non-specific phrases such as "highest prices paid" and "top prices paid" are objectionable and cannot be accepted; the terms "fair prices paid" or "state price wanted" may be used. A *specific* price must be stated on all *for sale* ads, except that a phrase such as "details on request" may be used when listing *quantities* of similar merchandise or *real estate*.

Box number or blind ads will not be accepted. Please give your *complete* name and address, so as to insure the prompt delivery of all mail or telegraphic replies. All advertisements *must* be accompanied by cash. Final closing date is the *5th of the preceding* month.

Please print all advertisements *plainly*—we cannot be responsible for errors due to illegible writing. Spell out all descriptive words; abbreviations may lead to serious misunderstandings and impair the effectiveness of your ad.

We reserve the right to edit all copy to conform with our standards, and to decline or discontinue any advertisement which we consider objectionable. All orders accepted are subject to these conditions.

In describing the CONDITION OF GUNS advertised these standard phrases must be used: PERFECT means factory condition. EXCELLENT means new condition, implying negligible amount of use. VERY GOOD means practically new condition, implying little use, resulting in no appreciable bore wear and only minor surface scratches or wear. GOOD means moderate use with some finish worn off, only moderate bore wear with no pits and nothing worse than a little roughness in the bore. FAIR means reasonable hard service, reasonable wear inside, nothing worse than minor pits in the bore, implying the gun is sufficiently accurate for hunting. POOR means marred appearance and pitted or badly worn bore.

ARMS CHEST transactions are based entirely on good faith and mutual satisfaction. Deliberate misrepresentation or disregard for ordinary business ethics will, of course, result in expulsion from N.R.A. Membership and from the columns of the Magazine.

Purchasers who wish to examine, before acceptance, guns or equipment purchased thru these advertisements should request shipment by express, C.O.D. *with examination privileges*.

AMMUNITION SALES

Prices on ammunition, like everything else, are out of line. In sales approved, however, through the main source of supply, WPB, the Office of Price Administration has established prices which were in effect the early part of 1942. In recognition of these regulations, therefore, the following policy is instituted for advertising of certain types of ammunition in the Arms Chest.

No large amounts of .22 Long Rifle ammunition will be advertised FOR SALE or WANTED. Amounts up to 1,000 rounds will be allowed if prices do not exceed $10.00 a thousand. .45 A. C. P. and .30-06 Gov't Arsenal ammunition (M1 and M2)—no amounts above 500 rounds, prices not to exceed $5.00 a hundred for the former and $10.00 a hundred for .30-06.

AUCTION TYPE ADS

Advertisers must state a specific price for items excepting in cases where quantities of similar merchandise are listed. The phrase "details on request" may then be used. But efforts to circumvent this policy by advertisers requesting a higher price than that listed in their classified ads, thus encouraging auction bidding, when brought to our attention, will result in refusal of further advertising from such an advertiser and the rejection of membership renewal.

FIREARMS & SUPPLIES—GENERAL

FOR SALE

FOR SALE—HI-STANDARD MODEL D, 6¾". Excellent inside, good out. Extra clip, holster and good supply N.I. Kleanbore .22 caliber L.R. First M.O. $90.00. Express collect. John A. Paulson, Devils Lake, N. Dakota.

FOR SALE—.30-'06 MAUSER '98 RIFLES. TWO new barrels. One used. $40.00, $35.00. 20 S.P. with each gun. Stamp, description. Hollis Miller, Bucyrus, R. No. 3, Ohio.

SELL—TWO .45 COLT SINGLE ACTIONS. ONE piece maple stocks, 5½" barrel, $30.00. 7½", $35.00. C. C. Milliron, Hagerstown, Maryland.

S.A.A. COLT, 4¾ BARREL, CONVERTED TO .22 L. R. by Sedgley, fine condition, $60.00, very accurate. S.A.A. Colt 4¾ barrel, .32-20. Reworked and sights by King, ivory grips. Pacific reloading dies, Bond mold. 300 new primed cases. 150 used cases. 100 factory shells. Heiser belt and holster, perfect, $115.00. Hi-Wall Winchester Hornet, D.S.T., custom stock. 26 in. heavy octagon barrel, fine. 150 loaded shells, $60.00. 70 Winchester 2R Lovell, beautiful stock by Niedner. 20 in. heavy barrel conversion by Johnson, perfect, $135.00. Have some components for above guns, stamp please. Harold R. Lyon, 125 Howard Street, Findlay, Ohio.

EXCELLENT COLT ACE, SUPER .38, S.W. 6 inch Triple-lock .44 Special, $75.00 each. Hi-Standard C, new, $40.00. Model E, $65.00. Good .38 Officer's Model, $50.00. 4 Inch Colt P.P., inside perfect, Audley holster, $40.00, good Colt D.A. 6 inch, laced holster, $37.50, excellent 4 inch Colt D.A., .38 Special, $40.00, Army Special, same, $45.00. S. & W., M. & P. 6 inch, $55.00. Heavy .38-44, Nickel, S. & W. Pearl grips, 100 cases, Mould, 250 Primers, excellent, $40.00. Excellent, .380 Colt, pearl stocks, $45.00. Ammunition for above. Springfield Musket dated 1848, 21 inch, Burnside, 16 gauge Muzzle loader, 5 lbs. All good at $10.00 each. Remington Rangemaster 37 AR Winchester heavy barrel 52 Speed Lock, Vaver sights, both excellent, $75.00 each. As new, Enfield Issue, $55.00. Plenty others, list 10 cents. K. Green, North Haverhill, N. H.

52 WINCHESTER, HEAVY BARREL, LATEST model, Lyman 77 front and 52 FH extension rear. Shot less than 200 rounds. Factory new condition, original box. Guarantee perfect, $75.00. W. E. Harley, Member, 4506 Bleigh St., Philadelphia, Pa.

FOR SALE—WINCHESTER '97, 12 GAUGE, 30 inch, full choke. Inside perfect, outside excellent, $42.50. Eugene Leavitt, Bridgewater, Vermont.

SELL—S.A. SPORTSMAN, EXCELLENT, 450 L.R., $35.00. B.&M. M26, .45 A.C.P. bullet seater, new $10.00. Andersen, 1117 Yeadon Ave., Yeadon, Pa.

44 S.&W. SPECIAL, BLUE, 6½, EXCELLENT IN, good plus out, $5.00 belt holster, box cartridges, $45.00. D. B. Conley, Swampton, Kentucky.

COLT DOUBLE ACTION, 5½" ROUND BUTT, .38-40 W.C.F., good, $35.00. Colt Frontier, 4¾", .41 caliber, finish worn, good shooting condition, 200 rounds ammunition, $35.00. 200 rounds .32 S.&W. Longs, $10.00. G. H. Grant, Alamogordo, New Mexico.

CROWN GRADE W. W. GREENER, 30 INCH, $200.00. Winchester Model 12-20, raised rib and Poly Choke, $100.00. Remington 31, 12 gauge, 28 inch, $50.00. Winchester 12-20, 2 barrels, $100.00. Ithaca No. 2, 12 gauge, 2 set barrels 26" and 30", $150.00. Fox 12 gauge Sterlingworths, $40.50 and $60.00. Winchester Model 12-16, $65.00. Simson 12-28, $200.00. Stevens Springfield 12 dbl. barrel, $30.00. Stevens Springfield 20 dbl. barrel, $30.00. Remington 12 Model, pump, $40.00. Remington Sportsman, 20, 2 barrels, $85.00. Ainsley, H. & H. original, Krupp barrel, 12-28, C grade, $85.00. Sauer 12-26, 6½ lbs., $75.00. Von Lengerke and Detmold, dbl. barrel 20, mfg. by Francotte, $75.00. Montgomery and Ward 12, single trigger, $30.00. Remington 37, Miracle trigger. Goss rear, new, $90.00. Winchester .45-70 Carbine, nickel steel barrel, $40.00. Winchester .52 Speed lock, $50.00. Winchester .348, $75.00. Winchester 64 Deluxe, .30-30, $75.00. Colt Woodsman, 6½ inch late model with holsters, $60.00. High Standard B, 6½ inch, $40.00. Colt Officer's Model, Target, $50.00. Colt .380, $35.00, with holster, Colt .32, $35.00, with holsters. Parker 12 gauge gun stock, straight grip, $10.00. Colt .45 Auto, new barrel, $45.00. Luger 9mm, holster, 1 box cartridges, $45.00. .357 Mag. cartridges, $8.00 per hundred. Zeiss Deltritem and case, 8 X 30, $100.00, excellent. French binoculars, 8 X 30 and case, $40.00. Bullard .38 Repeater, $35.00. Winchester Sharp, flat .44 and 100 cartridges, $25.00. 200—.38 rim fire cartridges, $4.00. Colt .38, 6 inches & holster, $30.00. .44 S. & W. Special, $50.00. Winchester 54 Hornet 48W and 438 Mounted Scope, 4 box ammunition $120.00, nice outfit. Medium size Woods Arctic Eiderdown, 100% wool lined sleeping bag, like new, $75.00. WANT—level winding reels True Temper rods, fly & bait. Harry L. White, Church St., Burlington, Vermont.

COLT POLICE POSITIVE SPECIAL, .32-20, 5" barrel, chromium plated, Franzite ivory grips, very good. Fifty cartridges. A beautiful gun, $40.00. .380 Remington Automatic, excellent inside, good out. Twenty-five cartridges, $32.50. 1000 .38 Special reloads, 158 grain, round nose bullets accurate, good service load, $55.00. Byron Engle, 3018 East Seventh, Kansas City, Missouri.

WINCHESTER, MODEL 70, .220 SWIFT equipped with, 10X Fecker scope, ¼ minute clicks, 60 rounds of ammunition, very good, $165.00. Winchester, Model 52, standard barrel, special peep sight, special stock, must be seen to be appreciated, very good, $75.00. 30 Luger pistol, 4" barrel, 40 rounds of ammunition, very good, $50.00. .30 Mauser pistol, (7.63) 6" barrel, 50 rounds of ammunition, very good, $50.00. Colt Woodsman, 6" barrel, very good, $50.00. W. M. Lafferty, 83 West Hudson St., Dayton, Ohio.

FEDERAL EXPLOSIVES ACT

Under the Federal Explosives Act of 1941 *all* buyers, sellers and possessors of powder and primers (not complete small arms cartridges) must be licensed. Such license is usually obtainable from your County Court Clerk. Purchasers must submit their license, or a certified or photostat copy thereof, to the seller at time of sale.

2050 WINCHESTER SWIFT 48 GRAIN BULLETS, $2.75 per 100. 800 Winchester Swift 55 grain bullets $3.00 per 100. 400 Handloaded Hornet Cartridges $7.00 per 100. Limited supply handloaded .38 ammunition, Wadcutters, round nose or hollow point ammunition, $4.00 per 100. Several hundred rounds following commercial ammunition. .45 Colt automatic, $6.00, .44 Smith & Wesson Special, .45 Colt and .357 Magnum $7.00 per 100. 3000 Winchester 116 Primers, 4000 Winchester 108 Primers, 3000 Remington 8½ Primers, $12.50 per 1000. 1, 4" barrel .357 Magnum Colt new service, fixed sights, special grips, shoulder holster and box of shells, condition good, $75.00 complete. 1, 2" barrel .38 Official Police Colt and box of shells, condition good, $55.00. 1, 6" barrel .357 Smith & Wesson Magnum and box of shells, $110.00. 1, 7½" barrel .44 Smith & Wesson, New Service, special grip, target sight and box of shells condition good, $75.00 complete. 1, 7½" barrel .45 Colt New Service, target sights, hand carved grips, and box of shells, condition good, $80.00 complete. 1, .22 Officer's Model, target sights, special hand carved grips and box of shells, condition good, $75.00 complete. 1, Waffenfabrik Mauser Oberdorf 8 mm., ramp front sight, 3 elevation iron sights, Special mounted Hensoldt Weltza Ziel Dialyt 5X, cheek rest, condition good, $250.00. Life Member N.R.A. Will ship any items upon receipt of money order. C. G. Harrel, 208 3rd Avenue, S. E., Minneapolis, Minnesota.

MODEL 70-'06, 330 WEAVER, G. & H. MOUNT, 750 components, 80 cartridges, excellent, $175.00. H.B. 52, Lyman 57 & 77, 1700 cartridges, perfect, $90.00. Ackley Varminter, original Newton action, custom stock, 500 components, 100 cases, 8X Targetspot, dies for Pacific tool, fired 50 times, superbly accurate, $200.00. Buhmiller H.B. high number Springfield, N.M., Bishop fitted stock, Lyman 48 & 77, unfired, 750 components, 200 cartridges, $125.00. 94 Winchester .30-30, ½ magazine, 180 components, refinished, very good, $40.00. New N.M. high No. Springfield action, Marble Goss bolt sleeve sight fitted, $65.00. Stith mount for 70, $12.00. To rifle buyers. B. & L. drawtube, Mossberg stand, $42.50. Pacific tool, scales, B. & M. measure, $50.00. Coat, glove, armband & sling, $12.50. M. O. only. C. Atkinson, Box 532, Ft. McClellan, Alabama.

IF YOUR MAGAZINE IS LATE!

The American Rifleman is mailed geographically, during the last week of the month preceding date of issue. In normal times all U. S. subscribers should receive the magazine on or about the first of the month.

In wartime, however, the strain on our postal and transportation systems makes it impossible to maintain normal magazine delivery schedules. While we hold to the geographical mailing, worked out in co-operation with postal authorities, delays in distribution to various sections may occur at times, although we have found that such delays are not necessarily confined to certain areas regularly. If your copy is late, therefore, we ask your indulgence. It is due to wartime conditions and beyond our control.

No Rifleman Should Miss

The 1943

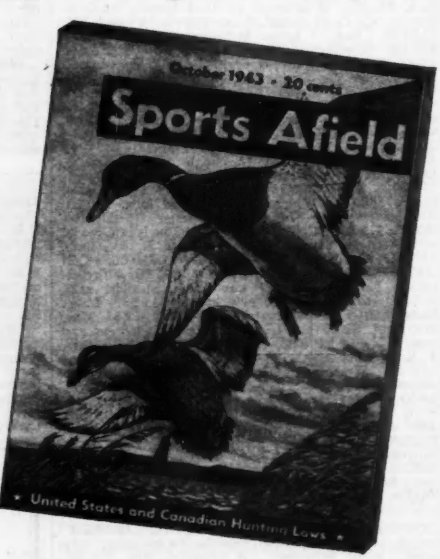
HUNTING ANNUAL

SPORTS AFIELD
HUNTING
25¢
ANNUAL

Contains 23 technical articles on arms and hunting, including Col. Whelen on the .22 rifle; Clyde Baker and Walter F. Roper on pistols and revolvers; Maj. Askins and Maurice Decker on repeating vs. double shotguns; Monroe Goode on the .270 cartridge; F. C. Ness on "Headspace and Accuracy"; Capt. Paul Curtis on "Getting into Battery"; Col. Ranlett, Art Carhart and Francis Sell on eastern and western deer hunting methods; articles on goose hunting strategies, how to make duck decoys, game cooking, tents for hunters, taxidermy, dogs and field trials; 6 full pages of game pictures and a 4-page complete summary of 1943 Hunting Laws. The Tenth Hunting Annual is now on sale, for 25 cents, at most U. S. newsstands; will be mailed to Canada for 30 cents.

The Strongest Battery of Arms Editors in Any General Sporting Magazine

SPORTS AFIELD'S Arms Editor is Maj. Jim Crossman, member of the Infantry (Testing) Board. Don't miss his article on the "Most Dangerous Big Game" in *Sports Afield* for November. Maj. Chas. Askins, Acting Gun Editor of *Sports Afield,* writes every month on technical subjects. Col. Townsend Whelen, Associate Editor of *Sports Afield,* began in our September number a 3-part serial on moose hunting, to be followed by monthly articles on living off the country, woodcraft and camping. Jimmy Robinson is the best informed clay bird expert in America.



SPORTS AFIELD,
760 Phoenix Bldg., Minneapolis 1, Minn.
☐ For the 25¢ (30¢ to Canada) enclosed send me the 1943 Hunting Annual.
☐ For the $1.50 enclosed ($2.00 to Canada) send me the 12 issues beginning with the..........................number.
Name..
Street ....
City.................................. State..........................

Both Magazines Are Now on Sale at Most Newsstands

JOHNSON 2R LOVELL. WINCHESTER H. S. action, Lyman scope. Gebby 2R Lovell, Winchester H. S. action, Litschert scope, have components for both, guns. Write for full details and price. Joe Fingal, 414 Maryland Ave., Wilmington, 55, Delaware.

UNFIRED MODEL 70, .30-'06, 330 WEAVER, B mount, Tilden safety, $130.00. Model 1917 Colt, commercial, 1 box rimmed .45 cartridges, $50.00. Official Police, .38 Special, 6", fired 20 shots, perfect, $50.00. Unfired Model 63 Winchester, $50.00. J. F. Madole, Wickliffe, Kentucky.

WINCHESTER 67 S.S. LIKE NEW WITH NEW sling, 100 L.R., $9.50. Ortgie .25 auto, nickel, good out V.G. in. Walnut and Franzite pearl grips. 12 rounds, $17.00. 50 copies of "Rifleman," $5.00. 42 "Popular Science," $2.00. 18 "Mechanix Illustrated," $1.25. 9 "Science and Mechanics," 50¢. 12 assorted Outdoor magazines, $1.25. All are V. G. condition. 500 "Keenfire" .177 cal. pointed pellets, $1.50. TRADE— .38 Special cartridges for .38 Short or Long Colt. R. E. O'Reilly, 3005 S. Webster St., Ft. Wayne, Indiana.

WINCHESTER MODEL 70 STANDARD. .300 Holland and Holland Magnum. Open sights, Weaver 330 with Stith mount, condition is perfect. Very accurate. Five boxes factory ammunition and one hundred new empty cases, $150.00. Carl Weidenmier, Berlin Center, Ohio.

VERY GOOD TO EXCELLENT COLT .45 AUTOmatic, with King's micrometer rear sight, black undercut front, wide trigger, trigger stop, hand honed action, match fitted barrel, .22 conversion unit, 500 factory reloaded .45 cartridges all $138.00. Parker 20 gauge VHE grade double, single selective trigger, automatic ejectors, 26" barrels, right improved cylinder left quarter choke, excellent except blueing worn at breech $125.00. Excellent Winchester .30-30 carbine, 180 M.C. and 20 S.P. cartridges, sheepskin case $67. Excellent .22 Colt King Super Target pistol number 1-A, Roper grips with thumb rest. Sheepskin holster, $78.00. Excellent .38 Colt OM 6" HB target. Roper sights and grips, also regular grips & King spur adaptor, 300 wadcutter reloads in target shooters boxes, Lewis holster, all $79.00. Fair .30-'06 Springfield, 1903 Model with 350 cartridges $55.00. Good Colt DA .38 6" $32.50. Bausch & Lomb draw tube 20X spotting telescope $25.00. King's Buffalo grain leather pistol case, holds four pistols, $15.00. G. D. Arnold, Valdosta, Georgia.

LIGHTNING CLIP FOR .38 COLT P.P., S. & W., M. & P. and Colt P.P. Special, reloads in 10 seconds, $2.50 p.pd. Write for bargain list, used revolvers, automatics, holsters, etc. (stamp please). Lee Sales Co., R-35 West 32nd St., New York.

EXCELLENT COLT .38 O.M.T.H.B. IDEAL tong tools, resizing and expanding dies, Ideal mould, Ideal bullet sizer, all, $80.00. T/Sgt. G. Aulabaugh, Hq. Sq. 12th Bomber Command, A.P.O. #520, New York.

OFFICER'S MODEL .22, EXCELLENT TO PERfect, Sanderson grips and 250 Shorts, $70.00. Money Order. George Eisenbise, 114 South 6th Street, Reading, Pennsylvania.

MARLIN, .38 W.C.F., 24", GOOD, 50 CARtridges, $37.50. Bench-type drill press, good, $20.00. Jack Saunders, Hays, Kansas.

38 CALIBER SUPER AUTOMATIC COLT CARtridges $2.50 box 50. .38 Short R.F. $1.50 box. 32 Winchester Special S.P. $4.00 box, 12 gauge Remington automatic skeet with ventilated rib, 26", $95.00, perfect. Model 141 Remington Game Master, 35 caliber pump, perfect, $85.00. 12 gauge Nitro Special Lefever, 26" double, open and modified, perfect, $45.00. .22 caliber H. & R. Sportsman, 6" double action, adjustable sight, 1000 L. R. shells, $50.00. 1 pair 8 X 25 binoculars, French make, Aurore-Dupont, adjust. eye piece, leather case and strap $45.00. All above guaranteed perfect, money order with order. Donald W. Clark, 30 Forest Avenue, Greenfield, Massachusetts.

FOR SALE—SMITH SPECIALTY, 12-28" F. & M., auto ejectors, pad, $95.00. New Winchester 12 Trap, 16, two barrels, ribbed 26" skeet, 28" full. Bradley sights, $100.00. S. & W. .22 Olympic, $35.00. New Match barrel .45 automatic, $4.00, four magazines $1.50 each. Life member, R. A. Compton, 902 Mulberry, Mt. Carmel, Illinois.

COLT OFFICER'S MODEL, HEAVY BARREL, 6" .38 Special, excellent, fired 120 lead, $85.00. C. E. Smith, Route #1, Brighton, Michigan.

WINCHESTER 12 MODEL, 28 GAUGE, FULL, solid rib, new, unfired, $90.00. (ammunition available) Colt .38 Official Police, $45.00. S. & W. .45, 1917, $42.50. Details furnished, odd lot ammunition, including rare Sharps, list 6¢. Paul Ratliff, N4912 Market, Spokane, Washington.

REMINGTON M14A, .30 RIMLESS, 19 LOADS 22 empties, King micrometer peep, excellent, $50.00. 400—.22 L. R., $4.00. 91 Hornet empties, $1.50. 70—.30-'06 empties, 18's, no splits, $1.00. F.O.B., Howard Warden, Beach City, Ohio.

WINCHESTER 52 SPORTER, FINE, $50.00. Griffin & Howe, .256 Sporter, good, $150.00. Winchester Single Shot .22 caliber Lovell, fine, $55.00. Hensoldt 8-30 Dayilite, $55.00. J. L. Baker, 611 Broadway, Mechanicville, New York.

MUST SELL TO SETTLE ESTATE. KRAG .30-40, 30 inch barrel. Hunted last season, stock and sights reworked, good shape, well kept and greased. First $65.00 received. Sam Hunt, Box 385, Springfield, Ohio.

MAUSER, POCKET CALIBER 6.35, EXCELLENT in and out, $25.00. Remington O. & U. Derringer, caliber 41 R.F., about new, $25.00. Baby hammerless, caliber .22 pearl grips, excellent, $12.00. Colt caliber 41 R.F. S.S. Derringer, excellent $18.00. Colt caliber .58 Civil War Rifle, new, in and out, $20.00. Japanese caliber 6.5 rifle with bayonet, about new, $38.00. O. Cummings, 35 Melwex Street, Bellevill, N. J.

.30-'06 SPRINGFIELD AS ISSUED, GOOD OUTside, excellent inside. 2 boxes shells, $90.00. Robert C. Edwards, Route #1, La Junta, Colorado.

FOR SALE—BRAND NEW MODEL 12 WINchester Magnum 12 gauge, never used, with 2 full cases of 3" shells, mostly 5's, few 2's and 4's, $160.00. George Portman, Wausau, Wisconsin.

MODEL 12 WINCHESTER 12 GAUGE, 30 inch full choke, perfect, with 4 boxes Super-Speed shells, 5 and 6 shot, $70.00. Weaver 440C scope, perfect, with new B mounts for Winchester model 70, also leather dust caps for same, $40.00. G. F. Snider, P. O. box 213, Connersville, Indiana.

EXCELLENT TO PERFECT, .357 S. & W. Magnum, 3½" barrel with King Special red post reflector front sight, white outline rear sight. Magna Grips, Mershon adapter, extra 6½" barrel, New S. D. Myers quick draw holster, outfit, $125.00. Ammunition, several hundred rounds at $3.00, per box. Colt .32-20 Official Police, 6" barrel, fixed blade, front sight, very good condition, with one hundred rounds of ammunition, $55.00. Arthur N. Jennison, Court House, Keene, New Hampshire.

FOR SALE—THREE, MODEL 1886 WINCHESTER rifles, caliber .33 with new barrels, $40.00 each. Three, Model 1894 Winchester carbines, caliber .32-S with new barrels, $35.00 each. Gail H. Bowen, Saranac, Michigan.

STEVENS BICYCLE RIFLE, .32 R.F. OUTSIDE good, bore rough but accurate. $15.00, heavy Remington-Hepburn for relining only, no sights, good outside, $10.00. List of old guns, curios, etc. for stamp. Paul St. Gaudens, R #2, Windsor, Vermont.

MARLIN MODEL, 38, REMINGTON MODEL 12, excellent 22's, $27.00 each. Excellent Krag, pistol grip, nice walnut, and checkering, 2 box shells, high speed, $60.00. E. T. Bonnett, Galesburg, Michigan.

OFFICER'S MODEL .38 HEAVY BARREL, FACtory condition, special G. & H. Bisley type hammer, special Harpe hand-honed action with 500 factory target loads, $95.00. 500 FA .45 auto recent dates, $25.00. Milford Baker, Darien, Connecticut.

FOR SALE—WINCHESTER MODEL 54, .22-3000 Lovell by Griffin & Howe, reloading tools, 500 primers, cases, bullets, powder if needed, scope blocks, $80.00, excellent. Winchester 52, Sporting stock, cheek piece, checkering on pistol grip and forearm, sling and scope blocks, Lyman 48 rear, aperture front sight, beautiful gun with 500 Long Rifle cartridges, $70.00, excellent. Remington automatic 12 gauge, 28 inch barrel, full choke, extra grade stock, excellent $65.00. Dr. R. W. Finch, Delhi, N. Y.

54 WINCHESTER, 22 HORNET, WATSON FRONT sight 8 inserts, 48 rear, custom stock, Brazilian walnut with cast off and cheek piece, checkered grip, beautiful workmanship, inlay under beavertail forearm, Pachmayr recoil pad, medal pistol grip cap, white parlin washer, lugs for quick detachable sling. 35 cartridges, rifle shot about 150 times, all like new, $95.00. Side mount base for Noske extra $5.00. H. E. Henry, Martinsburg, Pennsylvania.

FOR SALE—MODEL 81 REMINGTON AUTOmatic, .32 caliber with 330 Weaver scope, excellent, fired about 60 rounds, with 7 boxes cartridges, $145.00. M. A. Mueller, Muscoda, Wisconsin.

FOR SALE—SMITH & WESSON K22 MASTERpiece, perfect, with embossed Heiser Holster, $60.00. F. Dwight Foster, Conover Lane, Red Bank, New Jersey.

WINCHESTER .218 B., BEAD FRONT, PEEP rear sights, excellent, beautifully engraved on frame; barrel at breech and muzzle, lever and forearm cap, pistol grip and forearm carved scroll design like fine leather stamping; beautiful gun with 200 rounds ammunition and sheepskin case, $125.00. Winchester 86 Model, 50-100-450 very good with four boxes cartridges, $45.00. Colt .38 automatic military, good, with two boxes cartridges, $25.00. S. & W. 32, six inch barrel, round grip, very good, two boxes cartridges, $35.00. Carl Metzger, 2305 Canton Street, Dallas, 1, Texas.

FOR SALE—COLT .38 OFFICER'S MODEL PIStol, heavy barrel, excellent condition, $65.00. First money order. Albert Boring, 1064 Smithson Avenue, Erie, Pennsylvania.

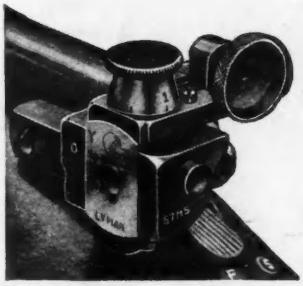
REMINGTON 513T, NEW, WITH 500 ROUNDS Palma L. R., $75.00. Frank McCormick, Box 603, Sonora, California.

REMINGTON FIELDMASTER, EXCELLENT, $35.00. B. C. Phillips, Toledo, 12, Ohio.

For Military Training

LYMAN No. 57 MS

RECEIVER SIGHT



A typical example of the adaptation of a popular peacetime sight to war needs is the Lyman 57 MS receiver sight mounted as standard equipment on the Mossberg rifle used for military training purposes. This type of Lyman sight has been a favorite with shooters in small bore competitions. The 57 MS is furnished with adjustable windage and elevation slides, and ¼ min. click adjustments. Lyman No. 57E for Winchester Model 75 training rifle.

The Lyman General Catalog, Free. Folders on all Commercial Products. Ideal Hand Book, 50 cents.

Lyman Sights

Metallic & Telescopic Sights • Ideal Tools • Cutts Comp.

MIDDLEFIELD, CONN.

FOR VICTORY
BUY
WAR
SAVINGS
BONDS
AND
STAMPS

WOODSMAN, 6½" EXCELLENT, KING SIGHTS, 2 magazines, sheepskin holster, 500 LR, $60.00. Early Smith, Box 1092, Radford, Va.

WINCHESTER .32 SPECIAL TAKEDOWN, EXcellent, shells, $36.50. Smith & Wesson .38 Special Target, excellent, 100 shells, belt, Holster, $60.00. Fred Heyen, Pratt, Kansas.

FOR SALE—COLT OFFICER'S MODEL .38 Special, 6 inch barrel, target sights, perfect, box Kleanbore, $65.00. Colt Woodsman, 4½ barrel, Berdon action, fired eighty rounds, perfect, $75.00. Winchester Model 12, full choke, 20 gauge, solid rib, ivory sight, recoil pad, excellent, $80.00. Zeiss 8 X 30 Deltrintem binoculars, extra spectacle eyepieces, hard leather case, factory adjusted optically, perfect, outside good, $100.00. R. B. Stewart, Miami Deposit Bank, Yellow Springs, Ohio.

.30-40 STEVENS-POPE KRAG, WITH REGULAR issue sights but without sling, very good, throughout, $45.00. Money order takes it. No. 40-65 Pacific Ballard, 30 inch octagon barrel, Lyman sights, reversible firing pin for rim or center fire cartridges, double set triggers, very good throughout, $15.00. Money order takes it. A. B. Coulters, 10 Ridge Street, Arlington, Providence, 9, Rhode Island.

FOR SALE—LATEST 52 STANDARD, B SERIAL, Lyman 17A and 48, Litschert 20X scope in Unertl mounts, all excellent to perfect. Complete, first M.O. $150.00. Carroll Hegwood, R.R. #3, Bedford, Indiana.

DEER OUTFIT, 1886 WINCHESTER .40-70 CALIber, 35 loaded cartridges, $30.00. Vion spotting scope, $30.00. J. E. Gebby, 46 S. Willowgrove Avenue, Dayton, Ohio.

REMINGTON SPORTSMAN, 20 GAUGE, WITH Poly Choke, excellent, 275 shells, 8 boxes Remington skeet load, 3 boxes for game, $94.00. Colt .22 Officer's Model, excellent sheepskin lined case, Heiser holster & belt, Mexican hand carved wood carrying case, lined, 300 cartridges, $75.00. George V. Kelly, 115 Brightside Avenue, Pikesville, Maryland.

VAIL CUSTOM .220 SWIFT, RELIEF ENGRAVing on barrel and action, also trigger guard and floorplate, with raised deer in 22K gold. Finest French Walnut stock. Goertz 2¼ scope. 150 cartridges, personal rifle, illustrated in "The Rifle in America" by Sharpe, $400.00, cost nearly twice to duplicate today. Remington 12 automatic, compensator, box shells, excellent, $60.00. I. J. .32 nickel, new $10.00. Target rifle, false muzzle, .38 caliber, silver trim, two silver patch boxes, balls, caps, powder, $40.00, set trigger. Roy Vail, Warwick, New York.

SMITH AND WESSON .38 SPECIAL, MILITARY and Police, 6 inch barrel, barrel slightly stained outside, otherwise excellent, with Heiser thong-bound holster, $55.00. First money order. Gilbert Stewart, Roscommon, Michigan.

"Good Pictures"
bring you
together

Send your soldier "Good Pictures" . . . of the old familiar scenes . . . the home place, the best girl, the old fishin' hole, sister Mary's new baby, the puppy now a dog, the cabin up the river . . . all the happy scenes of home sweet home. That's what counts a thousand miles from nowhere.

Make the most of your present camera. Take good care of it, and conserve vital film by making each picture a good picture. After Victory Argus will make new cameras . . . employing the new techniques and extensive experience acquired in War Production.

FINE AMERICAN CAMERAS
•
PRECISION OPTICAL INSTRUMENTS
•
AVIATION RADIO EQUIPMENT
•
BUY WAR BONDS

AWARDED TO PLANT 2
OPTICAL DIVISION

"Good Pictures"

Make the best use of your present equipment—learn more about lenses—films, filters and composition. Send 25¢ today for this 56-page booklet.

argus
INTERNATIONAL INDUSTRIES, INC
ANN ARBOR MICHIGAN

FOR SALE—DERAISME BINOCULARS, 10 X 32, new condition, perfect, leather case, $100.00. Colt .45 automatic, Government issue 1911, nickel plated, very good, $60.00. H. & R. Sportsman, double action, 9 shot .22 Long Rifle. 6 inch heavy barrel, Patridge sights, Walnut grip, brand new in factory case, $50.00. .300 Savage 99, 24 inch barrel, brand new, never fired, with 8 boxes Kleanbore, Super X 180 grain soft point, new ammunition, $110.00. All items listed to one buyer, $300.00. C. D. Reddy, Box 97, Norris City, Illinois.

.218 BEE ON SHARPS-BORCHARDT BY SUkalle with new Pacific tool, components and commercial loads; also Krag Sporter with scope, for complete description and prices write Charles Schreyer, 5304 8th St., N.W., Washington, D. C.

EXECUTOR SALE, FOUR EXQUISITE BALLARD Scheutzens, one rifled by Mr. Pope, details and prices on request. James Farr, Princeton, N. J.

SPRINGFIELD SERVICE RIFLES, FAIR TO good, $35.00, very good, $45.00, excellent $50.00. .45 Automatic, very good, extra parts, magazine, holster, ammunition, $50.00. 30-'06 cartridges, late issue, $6.00 per 100, Krag stocks, $4.00, with butt plate. John Gschwind, 4124 N. Leamington, Chicago, Illinois.

SPRINGFIELD .30-'06 BULL GUN, LYMAN 17A and 48 sights. Excellent, $75.00. Winchester 52 Standard, 17A and Vaver extension sights. Factory grease, $85.00. Two sets Redfield Bridge mounts, Winchester and Lyman Alaskan, new $30.00 each. One pair Lyman Targetspot four point mounts, excellent, $10.00. 257 Roberts B.&M. bullet seater $2.50, excellent. Lyman 438 scope, plain mounts, blocks and screws, new, $20.00. Two shell trimmers similar to Wilson, anyone caliber @ $7.50 each. Additional calibers $1.50 each, new. Frank H. Robertson, 1502 Broadway, Houston, 12, Texas.

LEFEVER 16, WITH 20 SUPER-X NO. 4'S, 50 mixed shells, $36.00. Compass $10.00. Handcuffs, $10.00. Express collect, see ad, page 52, April 43 Rifleman. Raymond Martinson, Suttons Bay, Michigan.

OFFICER'S MODEL .38 COLT, HEAVY BARREL, excellent, $70.00, with 300 rounds and zipper case. Alex Kaufman, 1164 East 54th Place, Chicago, Illinois.

LYMAN 15X TARGETSPOT, WINCHESTER 52, standard barrel, factory sights, speedlock, old safety, sling, both excellent, with 300 cartridges, $125.00. Russell Yawger, 142 Arlington, Paterson, N. J.

SALE 94 WINCHESTER .32-40, GOOD OUT, almost perfect in, 30 rounds ammunition, $35.00. Henry Webelhuth, Monica, Illinois.

SELL—.256 CUSTOM BUILT PRE-WAR NEWton rifle, cheek piece, stock, loading set, bullet mould, other extras. Write for description. Very good, $45.00. Austin Jewett, Belfast, Maine.

HOLLAND & HOLLAND, ROYAL EJECTOR double hammerless rifle, .240 Apex Super-Express. Zeiss telescope, original case with canvas overcover and all accessories; Jordan Press for reloading, and also for forming suitable cases from the .405's. Many new cases and bullets, World's finest and better than excellent condition. Price $750.00 with telescope, $675.00 without telescope. Cost over $1200.00 without telescope. Dr. George R. Hays, Second National Bank Building, Richmond, Indiana.

WINCHESTER 12-12-32 FULL, LATE, NEAR excellent, $65.00. Remington Model 10-12-30, full, slightly pitted, otherwise good, $35.00. Hi-Standard, latest A-4½", thumb rest grips, Heiser holster, belt, near perfect $60.00. Harrington & Richardson 922 heavy, excellent, $17.50. Mossberg Model 40-22, Tubular, peep, good $17.50. Remington 12-A-22, new barrel, new sights, $22.50. Winchester 1890, new barrel, new sights, new stock, new forearm, Short, Long, Long Rifle carrier, $27.50. H. J. McKinnon, Clarinda, Iowa.

SALE—B.S.A. .22 TARGET RIFLE, MARTINI action, custom stock. Unertl scope, 1 inch objective 10X, with extra 1½ inch objective 20X. Can be used either way. No irons, both excellent, as unit only, $160.00. M.O. only. Wm. Bach, Route #3, Box 107, Racine, Wisconsin.

SAVAGE 23D HORNET OILED STOCK, SLING, 344 Weaver scope T-Mount, all excellent condition, practically new, 100 factory cartridges, $65.00. E. C. Brown, 516 W. Douglas, Wichita, Kans.

REMINGTON RIOT SHOTGUN, 12 GAUGE, cylinder, 20 inch barrel, excellent in, good out, $55.00. 300 rounds .45-70-500 cartridges, sure fire, 20¢ each. 500 rounds .50-70 Remington center fire, firing condition unknown, possibly O.K., 15¢ each. Colt automatic .45, very good, 300 rounds shells, belt & holster, $80.00. J. D. Conklin, Radford, Virginia.

PERFECT WINCHESTER .32 W.C.F. LEVER action, 100 cartridges, $40.00. New Ranger slide action Repeater, .22 caliber, 250 cartridges, $30.00. Julius Low, Newpoint Place, Amityville, New York.

FOR SALE—SINGLE SHOT HIGH-SIDE WINchester heavy barrel .22 Niedner Magnum, reworked by Niedner & Griffin and Howe speed hammer, Niedner firing pin, blocks for scope; also bridge mounts for Weaver 440, stocked for scope. Long lever for working action, 4 boxes Niedner loaded cartridges, $125.00, perfect and a bargain. Swiss Martini action with Griffin & Howe barrel. Rechambered by Hervey Lovell for his new Sharp Shoulder, .219 Zipper, Scheutzen butt, beavertail forearm, set trigger, scope blocks, loading tools, perfect. Gun will do 1 inch groups with factory ammunition, $110.00. .30-30 Winchester Carbine, ten boxes Winchester soft point, new cartridges. Perfect never fired, $100.00, gun and cartridges. Have beautiful engraved fine double rifle weighs less than eight pounds, in trunk case never fired; also new .25 caliber Savage heavy barrel in rough. New Holland & Holland Super Thirty Mauser; also Jefferie Mauser .333 caliber, Fiddle back Circassian stock, ribbed barrel, excellent, and Wesley Richards Mauser caliber .318 like new. Trade—.30-30, .257 or .250-3000 or .270 fresh cartridges for 16 gauge shells, 7-7½ or 8s. Want—4X type A Noske scope must be perfect, with Mounts for Mauser; also want, .250 or .257 barrel fit Mauser Action. 1⅛ thread. J. L. Sinnett, Room 527 Hotel Thompson Bldg., Hot Springs, Arkansas.

FOR SALE—FOLLOWING COLTS, .38 SPECIAL O.M.T., hand honed, lightweight hammer, Roper sights, excellent, $80.00. .22 O.M.T., perfect, $75.00. .32 S. & W. caliber, quick draw 2" P.P., excellent $35.00. P.P. .38 Special 4", wood grips, excellent, $55.00. P.P., .38 S. & W. caliber, 6", perfect except scratch on cylinder, $50.00. P.P. .38 Special 5" rubber grips, excellent $50.00. O. P. .38 Special 4", perfect, $60.00. .45 A.C.P. excellent $50.00, another V. G. $45.00. 25 A.C.P., Audley holster, V. G. $25.00. Smith & Wesson 45 A. C. P. caliber D. A., excellent, $48.00. S. & W. .38 Special 5", good out, excellent in $45.00, S. & W. .38 Special 4" Victory, perfect, $50.00. Spanish .38 Special 5" V. G. out, excellent in, a good one $35.00. Same .38 Colt Caliber, 4", V. G. $25.00. H. & R., D. A. Sportsman, .22 caliber, perfect, $45.00. H. & R., 922-22 caliber, excellent $14.50. Savage .32 automatic, V.G. $30.00. Regina .32 automatic, excellent, $20.00. H. & R., .32 automatic, good $20.00. Pistol case (two guns) $5.00. K-22, 10 point grips $4.50. Winchester 97-12-30, full, Trap grade, excellent, $65.00. Winchester 40 automatic, Skeet, 12-27, components, V.G. $75.00. Savage automatic Skeet 12-26 components, V.G. $70.00. Herman Treptow, 209-11 South Main Street, Milltown, N. J.

---

1 SET BARREL, 20, CYLINDER AND SKEET, 26" Model B Fox, excellent, $6.50. William F. Moore, Algoma, Wisconsin.

.30-30 WINCHESTER 94, BARREL, INSIDE good, outside very good, $30.00. German 2-shot bolt action 12 gauge, hand-made stock, inside excellent, outside good, $6.00. Springfield .30-06, barrel altered, name off, custom stock, barrel poor, action polished, but tiny rust spots, $12.00. Targetmaster, micrometer rear, Lyman 17A front sight, sling and case, inside excellent, outside good, fifty shells, $12.00. Warren Stafford, 1 Elizabeth Street, Ridgefield, N. J.

SAVAGE MODEL 99, STYLE K., CALIBER .30-30, Jostam recoil pad, arm sling strap, Lyman, and folding leaf sights, Marble Rod, solid leather case, 2 boxes shells, new condition guaranteed, Browning automatic, 12 gauge, 30 inch full choke barrel, full pistol grip stock; also half pistol stock extra, solid leather case, splendid condition, Savage, $100.00 Browning, $60.00. Lewis Sibert, R.D. #2, Evans City, Penna.

.30-06 SPRINGFIELD, REMODELED BY WINchester, pistol grip, Lyman 48 peep sights, perfect, $100.00. A. Prasse, 4152 Botanical, St. Louis, Missouri.

FOR SALE—.270 ACKLEY MAGNUM, BEAUTIfully stocked by Hildeman, 330 Mounted by Stith. Dies for Pacific tool. 150 new loads, 130 grain Spitzer, shot 25 times, $225.00. Paul V. Prosch, 6 East Sherman, Hutchinson, Kansas.

EXCELLENT BELGIAN BROWNING OVER AND Under, 12-28, I.C. and M., solid rib, pistol grip, twin single triggers, selective ejectors, with 100 No. 6 shells $110.00. H. B. Hibbard, 27 Central Avenue, Hartsdale, N. Y.

REMINGTON .380 AUTOMATIC, BLUE. 2 boxes shells, perfect, $35.00. Remington .41 Derringer, blue, 2 boxes shells, very good, $20.00; Smith .38 New Departure, blue, 1 box shells, fair $20.00; Colt S.A. .38-40, fair but very tight. 1 box shells, $25.00. No trades. O. N. Gregg, 4241 Troost Ave., Kansas City, Missouri.

FOR SALE—.45 COLT AUTOMATIC. NEW BARrel, very good, $65.00. William Sexton, 338 East 53rd, New York City.

FOR SALE—$6.95 SPRINGFIELD CARBINE rifle. Caliber .45-70. Slightly used. Limited supply. Weil's Curiosity Shop, 12 Strawberry St., Philadelphia, Pa.

ISSUE SPRINGFIELD, CLEAN THROUGHOUT, $60.00. .45 Army Colt, shells, accessories, $60.00. Colt .44 Percussion, Civil War type, $20.00. 750 No. 10 Remington percussion caps, $4.50. F. A. Copper primers large rifle 1¢ each. Webley and Son fine 10 double, 32", $150.00. E. Henke, 559 So. Evergreen, Ventura, California.

REMINGTON .25 (EXPRESS) MODEL 30; Lyman 48 rear, ramp front, excellent in and out. 30 cartridges, 100 cast bullets, 100 primers, 12 cases and .25-35 Ideal loading tool. All for $85.00. W. D. Steel, 1309 W. 3rd., Sedalia, Mo.

ITHACA SINGLE BARREL, TRAP GUN, GRADE 4, ventilated rib, beavertail fore-end, 32" full choke, auto., ejector, perfect condition, $95.00. Public Sport Shops, R-65, 13 S. 16th St., Philadelphia, Pa.

SALE—.22 WINCHESTER MUSKET, V. G., scope blocks only. 1200 Shorts, $18.00; 25 Remington, 30A, 3X Marksman, excellent, 200 cartridges, $75.00; 52 Winchester No. 26721, excellent, 500 Kleanbore, $50.00; .32-40 Remington-Hepburn Target grade, fine condition, $20.00; WANT—.22-15-60 cases. Francis L. Cooper, Port Royal #1, Pennsylvania.

REMINGTON OVER & UNDER, MODEL 32 T. C., 12 gauge, barrels 30" full & full, ventilated rib, single selective trigger, Hawkins pad, leather case, perfect inside, very good to excellent outside, $150.00. Lyman H. Champney, Quarryville, Pennsylvania.

CHAS. DALY, DIAMOND QUALITY, 12-30 F. & M., Krupp Fluid Steel, Selective Ejection, Lymans, Stock, 14¼-1½-2½, Rubber pad, excellent, not a scratch, $255.00. Crossman Air Rifle, S. S., new condition, box of pellets, $15.00. D. W. Wentworth, M. D., R.F.D. #2, Wells, Maine.

SAVAGE SPORTER .22 LR, PERFECT BORE, $22.50; Colt .32 PP, pearl grips, holster, cartridges, $21.50; .45 Springfield $7.00. C. L. Hennig, 4220 Cuming, Omaha, Nebraska.

AM SELLING MY SHOTGUNS, RIFLES AND revolvers. Have rheumatism and can't hunt any more. Write for list and prices. Troy Dill, 21 N. 2nd Street, Highland Park, Illinois.

SPRINGFIELD .30-'06 SPORTER, PERFECT, $80.00. Springfield .30-'06 Service, perfect, $70.00. Winchester-Enfield, .30-'06 Sporter, perfect, $65.00. Winchester 95, .30-40, excellent, $50.00. Winchester 94, .30-30, V.G., $35.00. Western .22 Single Shot rifle, perfect, $10.00. Colt .38 Army Special, 5" unfired, perfect, $70.00. Off Hand, 10" light weight, V.G., $15.00. .30-'06 M-1 cartridges, 10¢. Al Bopp, 2411 Hastings Avenue, Evanston, Illinois.

WHITNEY .38 CF (BORE .357) SS ROLLING Block sporting rifle, no sights, good, $16.00. Ralph Drake, Osborne, Kansas.

Many Young Men

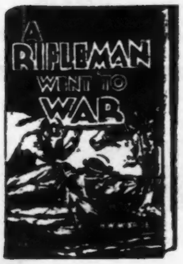
—in the Armed Services are today enjoying the protection of the same items of Marble's Outing Equipment that served them so well in the peaceful days they spent in the open.

MARBLE ARMS & MANUFACTURING CO.
Gladstone, Michigan, U.S.A.

Sportsmen's Knives,
Axes, Gun Sights,
Cleaning Implements,
Compasses, Waterproof
Match Boxes, etc.

MARBLE'S
FOR EVERY HOUR IN THE OPEN
OUTING EQUIPMENT

Reprinted BY DEMAND



A RIFLEMAN WENT TO WAR

Here is another useful, interesting book, always a good seller, now available again after being out of print for many months. Written by one of World War I's best known snipers, it is a fascinating true story of war as a Yankee Rifleman found it—a timely testimonial, too, to the value of straight shooting. Especially recommended for service men and civilian riflemen awaiting a call to the colors. Limited reprint edition. Price $3.50, postpaid.

NATIONAL RIFLE ASSOCIATION
Scott Circle **Washington 6, D. C.**

.38 S. & W., SINGLE ACTION WITH 3½" AND 6" barrels, $35.00. Outside very good, 6" barrel, excellent, 3½ barrel, good, made special without trigger guard. William Francher, Middlefield, Connecticut.

FOR SALE—KRAG CARBINE, GOOD OR BETter, 22" barrel, $30.00. S. & W. .32-20, nickel plate, 6" military and police, very good to excellent, $40.00. Emil McCornell, Mt. Arlington, N. J.

LATE WOODSMAN, EXCELLENT, $50.00. HIGH Standard, excellent, $45.00. Smith & Wesson .38 Special, perfect, $50.00, another, good, $30.00. Belgian Browning 16 gauge, Weaver Choke, three tubes, very good, $60.00. .30-40 Krag Sporter, converted by expert, very good to excellent, $55.00. .45 Colt Frontier, excellent, $45.00. M-12, 16 gauge Winchester, very good, $40.00. Ranger Pump, 12 gauge, good, $20.00. .32 Lever Action Winchester, good, $20.00. Ammunition available with above guns. .38 Special Western Wadcutters, $2.00, precision reloads, $1.50, 8 millimeter Lebel, .30-40 Krag, .45-70, .35 automatic ammunition 8¢, bullets and primed cases for .38 Special. C. C. Yant, 933 S. Madden, El Reno, Oklahoma.

---

9 MM. LUGER, CLIP, HOLSTER, SOME SHELLS, 3⅜ barrel, very good condition, $45.00. Charles Swoboda, Bessemer, Michigan.

COLT 45 AUTOMATIC, GOVERNMENT ISSUE, mechanically O.K., needs rebluing and new barrel, $30.00. H. B. Hibbard, 27 Central Avenue, Hartsdale, N. Y.

AUTOMATIC COLT .380 NEW IN FACTORY box, test fired, extra clip with 200 rounds, $50.00. Alex Kaufman, 1164 East 54th Place, Chicago, Illinois.

NATIONAL MATCH COLT .45 AUTOMATIC, fixed Patridge sights, two extra magazines, perfect, with service holster, belt, double magazine pocket, 140 cartridges $75.00. Russell Yawger, 142 Arlington, Paterson, N. J.

.30-'06 SPRINGFIELD, STAR-GAUGED BARREL, sporter stock, Lyman 48 rear, 17A front, 330 Weaver scope, very good, 100 rounds ammunition, $115.00. J. Gonder, 540 Thomas avenue, Forest Park, Illinois.

FOR SALE—AM SELLING PART OF MY COLlection of modern guns, S. & W. Special, .44, Military model, 6½" very good, $45.00. Colt Official Police, .38 Special 6", fancy grips, very good, $45.00. Colt Official Police, .32-20, 6", as new, $45.00. S. & W., M. & P., .38 Special, 6½", nickel, very good, $35.00, many others, stamp for list. D. W. McKercher, Wisconsin Rapids, Wisconsin.

The Marines Have Landed!

• This classic phrase means something today, when marines and army men are carrying the war to the enemy on many fronts. They land ready for action . . . these "rarin'-to-go" young Americans, and they have the world's finest equipment. Among other weapons of victory, Weaver 330 Scopes are giving a good account of themselves on the rifles of American snipers. The Weaver 330 brings them the same accuracy, the same clear vision, and the same sturdiness that meant so much to you on your hunting trips.

The **WEAVER CHOKE**

$9.75

including any two choke tubes

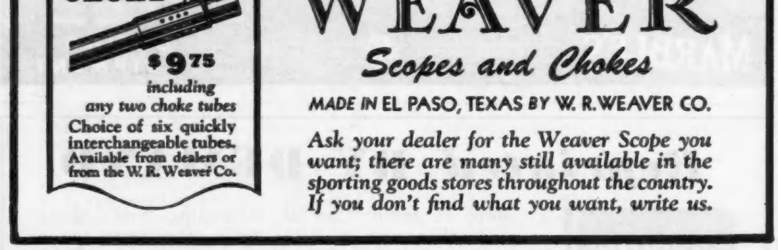
Choice of six quickly interchangeable tubes. Available from dealers or from the W. R. Weaver Co.

WEAVER

Scopes and Chokes

MADE IN EL PASO, TEXAS BY W. R. WEAVER CO.

Ask your dealer for the Weaver Scope you want; there are many still available in the sporting goods stores throughout the country. If you don't find what you want, write us.



BISHOP STOCKS

Our latest stock has cheek piece designed so comb can be cut down to conform to height of sights. Material the same high quality and supplied with tenite fittings attached. For all bolt actions. Price $5.00. Mannlicher type $7.50. Shipping weight of stock, 4 pounds. Catalog ready.

E. C. BISHOP & SON **Warsaw, Missouri**

W. J. JEFFERY, LONDON, ENGLAND, .333 Express rifle. Mauser action, floorplate, triggerguard, part of barrel fully engraved, five leaf British rear, ramp front, $225.00. Genuine Waffenfabrik Mauser, Mannlicher type Circassian stock. .30-'06, 20" barrel, Lyman 48 and folding British leaf rear, ramp front. Engraved butt plate, $225.00. Both beautiful guns in perfect condition from Washington estate. Three boxes .333 Kynoch cartridges, $3.00 each. Fecker target scope, 10X micrometer click mounts, perfect, $55.00. George Pace, 3512 Cameron Mills Road, Alexandria, Virginia.

FOR SALE—MODEL '99-G SAVAGE .303. FACtory condition inside, outside good, one box ammunition, first M.O., $50.00. George W. Weaver, 621 N. Main St., Louisburg, N. C.

COLT SINGLE ACTION ARMY .38 SPECIAL, excellent condition throughout. Ivory grips. Checkered backstrap, $65.00. Robert Allan, 1150 S. El Molino, Pasadena, 5, California.

SELL—EXCELLENT REMINGTON 37, COMplete iron sights, Lyman Junior Targetspot 10X, $125.00. Winchester High-Wall Hornet, custom stock, PG, cheek-piece, Lyman 438, 103, 17-A, VG out, barrel pitted but accurate, $35.00. WANT—2 boxes .300 Savage cartridges, 50 perfect .250 Savage empties. Dr. George I. Fielding, Glens Falls, New York.

FOR SALE—FINE NEW LIGHTWEIGHT ENGlish 12 gauge double shotgun, $150.00. Made by Arthur Howel. Stock slightly chipped, but repaired, and hardly noticeable. Condition otherwise perfect. 28" barrels, modified and full, straight grip stock, 14½X1½X2⅜", automatic safety, weight 6 lbs. 3 oz. Also fine German 16 gauge double, $125.00, 28" barrels modified and full, receiver nicely engraved, horn trigger guard, half pistol grip, fine walnut stock, 14½X1⅜X2⅝, weight, 5 lbs. 14 ozs., in good serviceable condition. Cash only. Condition guaranteed or money refunded. Grant Pierce, Bald Mountain, Maine.

$1.50 EACH. SPRINGFIELD RIFLE BARRELS. .30-'06 caliber. Second hand. Limited supply. We buy defense merchandise, optical goods, boat supplies, fire arms. Any Quantity. Pay cash. Weil's Curiosity Shop, 12 Strawberry Street, Philadelphia, Pa.

HI-POWERED RIFLES WITH AMMUNITION. Winchesters, Remingtons, Mausers, Lebels, Krags, Sharps, Ballards, Various actions for re-builders. Lists 10¢. George Brullesauer, 3957A Castleman, 10. St. Louis, Missouri.

WINCHESTER MODEL 21, 12 GAUGE DOUBLE barrel shotgun, automatic ejectors, 30" full and modified, brand new $94.35. Savage repeating rifles, Model 99 EG, caliber .303 and .250-3000, brand new, priced at $65.00 each. Stevens .22-410 Over and Under Rifle-shotgun, Tenite stock, $19.50, brand new. Public Sport Shops, R-65, 13 S. 16th St., Philadelphia, Pa.

FOR SALE—REMINGTON MODEL 11, 12 gauge, rib barrel with compensator and 5 choke tubes, inside excellent, outside very good, $80.00, including 100 shells. E. George Mellies, M. D., 7518 Forest View Dr., Normandy, (21) Missouri.

WINCHESTER 75 WITH WEAVER 330C, REDfield Jr., 77 front, Winchester rear, rifle excellent, scope and mount new, $76.00; Savage Utility gun, 12 gauge. .30-30, excellent, one box .30-30, and ten boxes 12 gauge shells, $41.00. Stamp please. L. D. Wilson, 122 N. Castillo, Santa Fe, New Mexico.

FOR SALE—WINCHESTERS: 10 GAUGE MODEL '01, $60.00. .30-30, Model 1894, $65.00, both fancy, excellent. .40-82, Model 1886, 140 high velocity loads, tool and mould, very good in, good out, $35.00. Marlin Model 1894, .25-20, excellent, $35.00. Colts; New Service .357 Magnum, $75.00; new pocket .32 caliber, 2", $35.00, both excellent. S. L. Pierson, Box 1007, Oklahoma City, Oklahoma.

WINCHESTER 70, .30-'06 PERFECT, 200 CARtridges, $110.00. Pocket watches, Gruen 17J thin model, $35.00. Waltham 7J, 16S, $12.50. 116 Kodak and case, $7.50. Sgt. Frank Sawyer, Box 35, Chico, California.

CARTRIDGES FOR COLLECTORS. FALL CATAlog, 10¢. Sedgley-Colt Single Action .22 Hornet. 6" barrel, Target sights, Short hammer fall. Excellent in and out, with box WRA Hornets, $65.00. McDaneld & Wheeler, Osborne, Kansas.

FOR SALE—EXCELLENT .38 OMT 7½", MERshon adapter, patridge sights, sheep holster, $60.00. Excellent .38 Special PP, King sights, red front, white outline rear, spring type shoulder holster, $45.00. .38 S. & W. $2.25 per box, .25-20, $2.50, .220 Swifts $2.25, .35 Winchester $2.25. T. C. Milam, 619 South 21st St., Ft. Smith, Arkansas.

DE LUXE CUSTOM MADE BY FRED ADOLPH, Geneva, N. Y. .250-3000 Mauser. 24" part octagon Krupp steel barrel with matted rib. Bead front and Lyman 48 rear sights. Fine Orbendorf Mauser action with D.S.T. and matted receiver, fine Circassian walnut sporting P.G. stock with cheek piece. Finely checkered wrist, fore-end and pannels. Trap in butt for cartridges. Chambered for the Savage .250-3000. Swivels and sling strap. Weight 7¼ pounds. Very fine in and out. 40 S.P. cartridges included. Price $175.00. Mannlicher Schoenauer 8mm. Sporting rifle, full stock Model, 20" barrel, D.S. trigger with 4X Mignon (Austrian) hunting scope with quick detachable factory mounts. Shot only a few times. Bore perfect, outside very good, with 50 S.P. cartridges and case. Lists $205.00. Price $165.00. Custom built 7mm. Magnum heavy target rifle with an Obendorf Mauser action, heavy selected Winchester 30" barrel, closely chambered for the .30-'06 cartridge necked down to 7mm. French walnut p.g. stock with cheekpiece finely checkered and ebony fore-end tip. Telescope blocks. With the rifle, complete ideal loading tools, shell resizer, special gang mould, casting nine 120 grain bullets of Pope design, also 260-175 grain bullets, 300 primed shells and a pound of No. 4320 Dupont smokeless, some primers and loaded cartridges. This rifle is extremely accurate, has made two inch groups at two hundred yards. Rifle in practically new condition. Weight 12 pounds. Price for complete outfit $135.00. DeLuxe .30-'06 Sauer Mauser. 24" part octagon Krupp Fluid steel barrel with matted rib. Caterpillar silver bead front, open folding rear and special tang peep sights. Double set trigger. Hinged magazine floor plate. Fine walnut panneled sporting stock with checkered p.g. Silver name plate, sling swivels. Weight 7¼ pounds. Fine in and very good out. Sauer Arms are famous for quality. Price, with 100 cartridges, $125.00. Cash only. No Trades. Kimball Arms Company, Woburn, Mass.

O. M. T. .38 SPECIAL 6", EXCELLENT, smoothed action, flap type, swivel police holster, $80.00. S. & W., M. & P., .38 Special 6", Nickel, very good, to excellent, service belt and holster, $60.00. S. & W., M. & P., .38 Special 4" holster worn out, very good in. Audley holster, $48.00. S. & W., M. & P., .38 Special 4" blue, new, $60.00. Colt .32 automatic, reblued, good, box cartridges, $22.00. Savage .32 automatic, excellent, box cartridges, $22.50. C. H. Lawson, 89 Myrtle Avenue, Edgewater, N. J.

SALE—CHAS. LANCASTER FAMOUS "OVAL Bore", double breech loading hammerless .475 caliber, express rifle, cased, with accessories, $300.00. H. W. Ray, life member, Rock Creek, Ohio.

LARGE STOCK OF AMERICAN AND EUROpean antique arms. Send 10¢ coin for latest 9th edition catalog, featuring the important Dr. Buck collection. Antique arms wanted. We buy single pieces or whole collections. Fair prices paid. Kimball Arms Co., Woburn, Mass. t.f.

.375 H. & H. MAGNUM, GENUINE REGIStered, on Magnum Mauser action. Beautiful stock. White line pad, engraved. Trap in grip with extra front sight. Ramp front, no-glare rear ramp, bracket for G.&H. Q.D. scope mount. Q.D. sling. Handfitted felt lined case. Special cleaning rod, oiler. Reloading dies. 200 fresh cartridges. 200 boullets. Complete $250.00, excellent. .220 Swift, Mauser, Niedner barrel. Nicely stocked and checkered, good blue, very accurate, first $125.00. J. Hendrick, 33416 Vine Street, Willoughby, Ohio.

.38 COLT POLICE POSITIVE (SPECIAL), EXcellent plus, cartridges, $42.00. .32 Savage Automatic, excellent, extra clip, cartridges, $25.00. .25 Colt Automatic, very good, extra clip, cartridges, $23.00. .351 Winchester Automatic, good to very good, 25 cartridges, $45.00. Money orders only. Richard Magoun, 40 Brooks St., West Medford, Mass.

BELGIUM BROWNING 12 GAUGE AUTOMATIC, 2 barrels, full and skeet, with case heavy load shells, $140.00. .38 Colt Officer's Model, heavy barrel, $67.50. 20 gauge Remington automatic Sportsman, with Weaver choke, $75.00. .22 Remington automatic Long Rifle, Model 241, like new, $37.50. Parker V. H. double, good shooter, $35.00. .380 Remington automatic pistol, $22.50. .22 Colt Officer's model, like new, $55.00. .250 Savage rifle, 99G, $45.00. Shells for all above guns. J. Z. Stevens, Clear Lake, Iowa.

VERY GOOD GOVERNMENT SPRINGFIELD Sporter .30-'06, No. 1,406,843, selected for accuracy, 48 rear, Redfield front, scope blocks, extra bolt assembly, spare parts, box ammunition, $75.00. Ray Gelineau, R.F.D. #1, Tilton, N. H.

SPRINGFIELD SERVICE RIFLE, T STOCK, high serial, about new, $65.00. Springfield Sporter action, NS, high serial, blued, $35.00. Catalog Nunnemacher collection, 2 vols., about new, $25.00. Few boxes .30 and .257 caliber and other cartridges. Want—.257 barrel for Model 70, new or perfect, DCM Sporter stock. R. Wipprecht, 515 S. 42nd St., Omaha, 5, Nebraska.

SMITH & WESSON .38, FOUR INCH, NICKEL, fair, $22.50. Heiser holster 1710, 7½, 45 S.A. $3.50. 52 Standard stock, oil finish, checked, $5.00. Rifleman 1934, To June 1941, $1.00 year. Harold Swartz, Upper Sandusky, Ohio.

PARKER V. H. 12-26 IMPROVED CYLINDER & modified, excellent, with leather case, $75.00. Winchester Enfield issue, excellent, $35.00. Andrew Kersch, 1516 Beach avenue, New York City, N. Y.

REMINGTON M11 AUTOMATIC, 12X28, MODIfied, recoil pad, very good, $67.50. L. C. Smith Ideal, 20X28 full, moulded leather case, excellent, $95.00. Parker Trojan, 12X30 full, very good,, $75.00. Winchester M64, .30-30, Lyman, excellent, $70.00. Remington Gamemaster, .30 Remington, excellent, $75.00. Winchester M95 Takedown .405, shotgun butt, good, $50.00. Winchester M86 Takedown .33 WCF, shotgun butt, very good, $50.00. Marlin M94 carbine .38-40, excellent, $40.00. Colt Officer's Model Target .22 L.R., King sights, Roper grips, very good, $75.00. Colt Frontier .38-40, 7½" barrel, custom reblued, excellent, $40.00. Colt Super .38 automatic, very good, $60.00. Mauser Pocket Model 32 automatic, very good, $27.50. Many others. List. Stamp. Ed Howe, Coopers Mills, Maine.

---

12 GAUGE REMINGTON, MODEL 10, 30 INCH, full, case, very good to excellent, $50.00. Money Order. Wm. Geiseman, 511 Wyandotte, Freeport, Illinois.

TARGET WEIGHT WINCHESTER 70, .30-06, new, never fired, 48 rear, 77 front, 500 rounds late issue ammunition, mostly National Match, $195.00; also gun crank collection rifles, shotguns, pistols, revolver, scopes and ammunition. Write for list. Harold C. Wood, 531 Chew Street, Allentown, Pennsylvania.

---

81 REMINGTON AUTOMATIC .32, BORE PERfect, outside excellent, Sheard front, folding leaf, Lyman peep, $85.00, 8 boxes Silver Tips and Core Lokts, @ $1.75. M70 Winchester .257, bore perfect, outside excellent, Tilden safety, 330 scope, Stith mounts, sling, tapped for Weaver mount, $105.00. 8 boxes .257-100 grain and 117 grain Silver Tip and Core Lokts @ $2.00. Complete loading kit and components for .257 sold with rifle only. 23D Hornet, excellent, 29 S. Weaver, Stith mounts, Sling, $56.00, with 3 boxes 45 grain High Speed soft point. Iver Johnson 16 Single, excellent, 3 boxes shells, 2 boxes rifled slugs, $18.50. .357 Magnum, Colt Shooting Master, bore perfect, outside excellent plus, $90.00, with 6 boxes of .357 cartridges, $2.25 box. Lloyd Folsom, Member, 116 Bartholomew Street, Peabody, Massachusetts.

FOR SALE—COLT .45 AUTOMATIC, GOV'T. Model, perfect, with fine holster, three magazines and fifty Winchester cartridges, $65.00. Robert F. Bley, Gateville Road, Bound Brook, New Jersey.

WARNING *to Hiro-Hitler*

★ REDFIELD Junior Scope Mounts – favorite of American sportsmen – is now standard equipment on American Snipers' rifles. That's bad news for Hiro-hitler...and good news for woodchucks, deer and other game. No REDFIELD sights will be available for civilian use until the war is over. However, we CAN send you the Redfield shooting guide and sight catalog for your sporting library. It's good reading – and it's FREE. Send for your copy today.

REDFIELD GUNSIGHT CORP. 3315 GILPIN ST.
DENVER, COLO.

KEEP SHOOTING—WITH MUZZLE LOADERS

Powder, Caps and Lead Still Available in Limited Quantities
Our Publization MUZZLE BLASTS Tells Who Keeps The Supplies.
. . . Lists Match Dates . . . Tells What's Happening and Who's Who
. . . $1.50 Per Year.

We Own Our Own Range And Are Planning Improvements

Buy Recent Books on The Frontier Guns—Through Us

NATIONAL MUZZLE LOADING RIFLE ASSOCIATION

E. M. FARRIS, Secretary, Portsmouth, Ohio

1.00. GOVERNMENT LEATHER HOLSTERS for .45 automatic pistols, slightly used. Weil's Curiosity Shop, 12 Strawberry St., Philadelphia, Pa.

SHOTGUNS WITH AMMUNITION. DOUBLES. Fox, Parker, L. C. Smith, Remington, pumps, automatics. Over and Under. List 10¢. George Brullesauer, 3957A Castleman, 10, St. Louis, Missouri.

COLT OFFICER'S TARGET MODEL REVOLVER. .38 caliber 6" heavy barrel, perfect, $85.00. Colt Ace .22 caliber automatic pistol, perfect, $87.50. Colt Officer's Model revolver, .32 caliber, Target sights, like new, $75.00. Public Sport Shops, R-65, 13 S. 16th St., Philadelphia, Pa.

SPECIAL SALE OF NEW AND USED SHOTGUNS and rifles. List ready. Stamp please. Kimball Arms Company, Woburn, Mass. tf

---

FOR SALE—.25 CALIBER, 30S REMINGTON, Hart Trigger. B. & M. marksman scope. Jordan press, dies, Trimmer, components and loads for about 700 rounds. Some accessories, $140.00. All good to excellent. Details on request. F.O.B. Cleveland. License required, life member, J. M. Barry, 2299 Sholl Road, University Heights, 18, Ohio.

LYMAN SUPER-TARGETSPOT, 10 POWER, mounts, excellent, $105.00. Winchester '97, 12 gauge, Cutts, spreader and modified tubes, very good, $45.00. Remington Sportsman, 20 gauge, 28 inch modified, excellent, $70.00, shells extra. Joseph Stashak, 16 North Second Ave., Manvilles, New Jersey.

FOR SALE—PARKER CHE 12 GAUGE, WITH two sets barrels, 26" open and modified. 30" modified and full, stock with recoil pad, 14" X 1⅝" X 1¾", perfect, factory refinished, leather case, $350.00. W. W. Fowler, Greenville, S. C. 11-43

FOR SALE—.375 MAGNUM, NIEDNER CUSTOM made, Lyman 48, Ramp front. Very good condition. Price $100.00. Loading set and ammunition available. Dr. J. T. Maxwell, 1140 Medical Arts Bldg.. Omaha, Nebraska. 11-43

REMINGTON ROLLING BLOCK .40-50, GOOD. $17.00. Colt slide action, .40-60. 30 cartridges. reloading tools. $17.00. Winchester tools. .22 W.C.F. and .25-20. .57 Snyder mould, $2.00 each. .50-110 cartridges. $1.80 per 20. .32-40 mould, $3.25. Fred Wainwright, Grayling, Michigan.

ONE .22 LOVELL, REMINGTON-HEPBURN ACtion, burl walnut stock, excellent in and out, very accurate. A5 Winchester scope, Lyman click mounts. 93 cast bullets. 263 jacketed bullets. 46 loaded cartridges. 54 empty cases. 400 small primers, complete, Ideal No. 3 reloading tool, $85.00. One Ranger double barrel, 16 gauge shotgun, excellent, 5 boxes Super X shells, $35.00. Robert N. Carroll, 829 Market St., Wheeling, West Virginia.

FOR SALE—COLT OFFICIAL REVOLVER, .22 caliber, excellent, $65.00. Sharps rifle caliber .50-70, condition good, $15.00. 500 U. S. Army caps, $6.00. 3 copper powder flasks, $9.00. F. W. Daniels, Sullivan St., Charlestown, N. Y.

REMINGTON, 12 GAUGE, MODEL 10, 32", $46.00. 30" ribbed, $55.00, both full choke, excellent. Binoculars, Bausch & Lomb, 6 X 30 Military, $66.00. Colmont 5 X 33, $66.00. Hoff 10 X 35 Military, $66.00. Colmont 8 X 24, $36.00. DuBois 8 X 24, $36.00. Telescope, 20 X 42, $24.00. 10X to 50X, $24.00. Vion 33 X 48, $42.00. Astronomical three inch, 42X, 84X, 126X, 150X, Sun. $135.00. All these, optically, mechanically, perfect. Write Paul Schweer, Donnellson, Iowa.

DETECTIVE SPECIAL, ROUND BUTT, LATE model, factory box, excellent, Audley holster, $55.00. C. H. Lawson, 89 Myrtle Avenue, Edgewater, N. J.

45-70 SPRINGFIELD, VERY GOOD, BORE PERfect, $7.50 F.O.B. Ft. Worth, box .45-70 shells, $2.00. D.W.M. Luger, holster, extra magazine in leather case, .30 caliber, good, $30.00. H. H. Hatcher, 4724 Birchman, Ft. Worth, Texas.

ALL VERY GOOD, WINCHESTER 52 HEAVY with 500 cartridges, $75.00. .22 Colt Woodsman. 500 cartridges, $50.00. S. & W. 1917, sheepskin case, $50.00. Zeiss 6 X 30 Silvarem and case, $85.00. .30-40 Long Krag, $25.00. .30-40 cartridges, 6¢ each. George Cummings, Harrison St., Dover, N. J.

D. W. M. 30 LUGER, 3¾" BARREL, PERFECT. few shells, $60.00. 37 A. R. Remington, perfect, $80.00. Stamp for list of other items. Joseph Rupp. 421 College Avenue, Lancaster, Pennsylvania.

S. & W. .22-32. EXCELLENT, 500 ROUNDS AMmunition. $60.00. .50-70 Springfields, good, $7.50 each. 4 Kentuckies, rifled, $15.00 each. 125-.30-30 reloads. trade for? 140 shells, 16 gauge, $10.00. Ernest Baldwin. Trenton, R.D. #1. N. J.

The Quest for Trout
Money in Mink
Bird Dog Training Made Easy
Crow Shooting
Retriever Training

Quail and the Quail Dog
Practical Fox Trapping
Training the Coonhound

Big $1 Bargain Offer

WHEN you have the opportunity to save ⅓ on your subscription to OutDoorsMan, right now is the time to subscribe. You get a full year of OutDoorsMan and any one of the Out-Doors-Man Handbook Series Free for only $1.

Taking advantage of this offer saves you 45¢. Fill out the coupon below and we'll enter your subscription and send you postpaid the Handbook of your selection.

OUTDOORSMAN HANDBOOK SERIES

1. **Training the Coonhound**
2. **Hunting Wild Turkeys**
3. **The Quest for Trout**
4. **Money in Mink**
5. **Retriever Training**
6. **Whitetail Deer Hunting**
7. **Bird Dog Training Made Easy**
8. **Crow Shooting**
9. **Your Dog's Care**
10. **Bass Fishing Facts**
11. **Camp, Trail and Canoe**
12. **Quail and the Quail Dog**
13. **Practical Fox Trapping**
14. **Panfishing**
15. **Nutria Raising**
16. **Elementary Trapping**

We'll be glad to fill your order for any of these books at 25¢ each. We pay the postage.

OUTDOORSMAN, 919 N. Michigan Ave., Chicago, Ill.

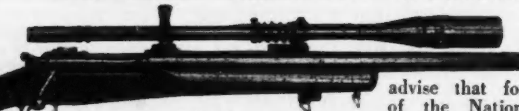
Enter my subscription for one year and send me book No. .... Enclosed is $1.

Name ....

Address ....

This coupon is from the American Rifleman

UNERTL TARGET SCOPES



To Shooter Friends, Unertl Optical Co. wishes to advise that for the duration of the National Emergency, they cannot furnish target scopes but hope that their friends will keep in contact by writing for Free Booklet.

412 Cemetery Lane J. UNERTL OPTICAL CO. Pittsburgh (9), Pa.

SALE—WOODSMAN, 6½ BARREL, 1000 MATCH Long Rifles, perfect, $90.00. Springfield .22 Automatic, Garand type, full-stocked, sling, 1000 Long Rifles, perfect, $120.00. Colt .45, special job, super accurate, good out, perfect in, 500 shells, $115.00. Colt .38 Super, new condition, extra barrel and magazine, 1000 Kleanbores, $155.00. Mauser Military pistol, 7.63, perfect, 500 shells, $95.00. Two Lugers, 3½ and 6 inch, perfect, 200 shells each, $90.00 each. Mannlicher, 9mm, perfect and a beautiful gun, full stocked, Lyman peep, 700 shells, $300.00. All above with sheepskin cases. Weaver 1X, Lee Dot, B Mounts, $35.00. Wollensak 45X-70X Acromatic telescope, tripod adjustable 2 to 7 feet, sun lens, leather case, new condition, $115.00. Wollensak sport glasses, 2X and 3X, cases, $15.00 each. F. R. Guy, Box 97, Montgomery, Alabama.

500 8½ REMINGTON PRIMERS $5.00, .22 caliber barrel, stock & forearm for B.S.A. action, good $10.00. Hopkins & Allen XL No. 4, .38 Rim-Fire Pistol $5.00. .30-'06 Bull gun barrel Springfield, good $6.00. Underwood Universal Portable 41 Model typewrjter, $50.00. 99 Savage .250-3000 E. G., repaired stock, like new, 68 cartridges, open & Lyman peep, Army saddle scabbard, all, $70.00. One dozen 4 inch round handle Needle Files, assorted, $2.50. Starrett 230 Micrometer 1 inch, good, $6.50. Expanding reamer 23/32 to 25/32, excellent, $3.00. Springfield sear & trigger, $1.50. Colt Bisley 4¾, .32-20 good, holster, 50 cartridges, $25.00. Money orders. J. D. Huffman, Riggins, Idaho.

PERFECT LYMAN 5A SCOPE, MICROMETER mounts, never used, $50.00. Excellent .45 Colt pistol, regulation belt, holster, four clips, two clip carriers, 169 old cartridges, $60.00. Krag as issued, sling, Pacific peep, Clark mounts for Weaver scope, 800 Peters Rustless cartridges, $100.00. Harry Dawson, Tewksbury, Mass.

FOR SALE—.38-44 S. & W. HEAVY DUTY, nickel, perfect, $70.00. Latest 12 gauge Remington 11A Automatic, 26 cyl., perfect, $75.00. .22 Winchester 74 Automatic, Shorts only, excellent, Hartmann gun trunk inside altered, 1000 Shorts, outfit, $58.00. .22 Savage Hi-power, 99 Takedown, 80 Non-corrosive cartridges, $38.00. Martin mahogany guitar, Arched model R-18, case, excellent, $55.00. Details stamp. Russell Elder, Griffin, Ga.

GUNS AND AMMUNITION LIST FOR STAMP. Alliance Gun Exchange, Alliance, Ohio.

WINCHESTER PUMP, MODEL 12, 12 GAUGE 30 inch, full, ventilated rib, straight grip, recoil pad, catalog No. 1257, $132.00. Remington pump, Model 31, 12 gauge 30 inch full, rib, $77.50. All or any part 2½ cases shells with each gun, $36.00 per case, (shot sizes, 2. 6, 7, 8, & 9's). Winchester Model 12, 16 gauge, 28 inch modified, $70.00. All or any part of 1½ cases shells @ $36.00. 4, 6, 8, & 9's. Remington 141, 35 caliber grade B, checked, very pretty wood, 40 loads, $100.00. Remington 141, .35 caliber standard grade, 40 loads, $84.00. Remington Automatic Model 81, .35 caliber, 40 loads, $100.00. Will sell guns separately but not the ammunition. Iver Johnson Model 88, 8 shot, 6 inch Super Shot Sealed 8, .22 caliber 1000 Shorts, $40.00. .45-90. .38-50, .348 Winchester, .375 H. & H. Magnum, $3.00 per box, 25 Remington, $2.50 per box. 28 gauge Nitro express, 4 shot, $34.00 case. .38 Super Automatics, $3.50 per box. 29-.351's, $3.00. Reels: Shakespeare Service, Star drag, $12.00. Shakespeare Criterion, $11.00. South Bend, No. 750, $12.00. South Bend, No. 760, $13.00. No C.O.D.'s. R. T. Anselin, Life Member, 1719 Dunlavy Street, Houston, 6, Texas.

FINE RIFLES, INCLUDING WINCHESTER 75 Sporter, 70 Hornet, Mauser .30-'06, Winchester 53-.25-20, Remington 12. A few special barrels, small motors, power tools, flexible shafts. Not a dealer. Member. What do you need? Stamp for prices. A. R. Platt, 206 Taylor St., Pittsburgh, Pennsylvania.

CHARLES DALY DOUBLE BARREL 12 GAUGE, Diamond quality, excellent condition, sole leather case, $100.00. Wilkey, German make, 3 barrel 16 gauge, rifle barrel 9.3X72 and high grade scope, also ammunition, $300.00. Original cost $650.00. Parker 10 gauge, double barrel hammer, box shells, $25.00. Herman Meitzner, Mt. Clemens, Michigan.

.45 COLT COMMERCIAL, VERY GOOD, $75.00. .45 Colt Government, new factory finish, dull black, $65.00. .45 Colt Government, new factory finish, dull black, $55.00. S. & W. Magnum 6", near perfect, $125.00. S. & W., .38 Special target 6", near perfect, $65.00. .45 Colt Single Action Army, 7½" barrel, inside perfect, outside good, $35.00. .32 Colt automatic, outside good, poor barrel, $30.00. 20 gauge Winchester pump, near new, full, $55.00. 20 gauge Winchester pump, full, solid rib, $75.00. 12 gauge Winchester pump, full, solid rib, 32" barrel, $75.00. 12 gauge Winchester automatic, full, $50.00. 12 gauge Stevens pump, full, $35.00. 12 gauge Burgess pump, better grade, $325.00. Model 70, .257, factory sights, factory grease, trade for Winchester pump, ventilated rib, 12 gauge. Colmont eight power, $45.00. Model 1895 .30 U.S., near new, $55.00. Arthur B. Colwell, 48 Wendell Street, Providence, R. I.

.38 ARMY SPECIAL COLT, 100 SHELLS, 5 INCH, $25.00. .22 S. & W. Kit gun, fired 10 times, $45.00. 12 gauge Remington Sportsman automatic, leather case, 5 boxes shells, $60.00. .22 Colt Officer's Model, Redfield front, 5 boxes shells, $50.00. .30-'06 Enfield Sporter, Redfield ramp front, Micr. rear. Beautiful circassian inlaid stock, cheek piece, $60.00. No. 5 Powder measure, $6.00. .38 Special B. & M. Straight-line reloader, $6.00. .38 Special Ideal sizer & reloader, $10.00. Cpl. R. Yoder, U. S. Marine Corps, Great Lakes, Ill.

NEW SAVAGE LIGHTWEIGHT AUTOMATIC 12-28 modified, factory carton, never shot, 5 boxes shells, $95,00. Sedgley Springfield Hornet, Lyman 48, like new, 193 cartridges, $100.00. J. Caffrey, 93 South Tenth Street, Newark, N. J.

SALE—COLT OFFICER'S MODEL 6", MICROMeter, full length rib sight, very good, 1000 reloads or 1000 primers, $85.00. Colt Official Police 6", King Rib, Short Action, skeletonized hammer, very good. 500 reloads or 500 primers, $80.00. 12 gauge Model 12 Winchester, 28" full, very good, $55.00. William Kendall, R. D. #2, Canonsburg, Penna.

FOR SALE—STANDARD M70 WINCHESTER, .250-3000, $70.00. Weaver 330-C, $32.00. Stith mounts for M70, $14.00. Schmitt No. 12 tool for .250-3000, $33.00. .25 caliber Wilson neck reamer, $5.00. Redfield WT 70 receiver sight, $8.00. All above excellent in and out. 600 No. 9½ primers, $6.00. 640 jacketed bullets, .257 dia., $12.00. 220 cases fired once, $11.00. 4 pounds Lightning, $6.00. 2 pounds Hi-Vel No. 2, $3.00. Will consider .22 L. R. ammunition in trade or part payment. Max Adams, 1229 South Home Avenue, Berwyn, Illinois.

SALE FINE RIFLES, M70, .22 K-HORNET, Beautifully stocked and engraved, Standard weight, L48 sight, Redfield Jr. mount, extremely accurate, all work by Niedner, sheepskin case, fired about 200 rounds, Perfect, $250.00. 200 factory loads and considerable components extra with above rifle. Perfect J. M. Marlin's Ballard, .25 Rim-Fire, entire rifle made up by Niedner, beautiful stock and engraving, fired about 300 rounds, Heiser leather case, sheepskin inner lining, about 1000 rounds factory ammunition. Rifle $250.00, ammunition $15.00. Hensoldt lightweight Roof Prism, Sport Dialyt, 6 X 30 binoculars, perfect condition, used once, $150.00. All above cash only, no approvals but money gladly refunded within 10 days. B. H. Biays, Jr., 7010 Exeter Road, Bethesda, Maryland.

EXCELLENT .38-40, 12 GAUGE HAMMERLESS combination, rifle barrel sweated in left of Batavia Leader, rifle sights, $35.00, trade for Remington .35 Automatic. .45 Colt D. A., only 1½ inch trigger, side rod ejector, barrel 6", fair, $28.00. 1886 .45-70 Winchester, excellent, $35.00. Falling block Remington .32 rim, barrel poor, $4.00. Ira J. Moody, McGregor, Iowa.

ANNOUNCING NEW CATALOG NO. 23 DEscribing over 1500 bargains, 25¢; modern and antique firearms, accessories, War Relics, binoculars. 6X30 B&L, $70.00. 6X30 Voigtlander, $70.00. Brand new .45-70 Springfield $18.50. Ammunition, $2.25 box. Bandolier .30-06 $5.00. .303 Short Lee Enfield, $46.00. Ammunition $3.00 box. '98 Mauser Rifle, $32.00. 30" Krag $35.00. .30-'06 Sporters and many Kentucky rifles. 12 gauge Stevens $36.00. 12 gauge Ranger Pump, $42.00. 12 gauge Smith, $42.00. 12 gauge Parker, $85.00. 45 Automatic, $50.00, and $58.00. Lugers, $48.00 and $56.00. .35 caliber S. & W., $32.00 and $37.00. Ammunition $3.25 box. 380 Remington Automatic, $38.00. 380 Colt, $42.00. 32-20X5" Police Positive, new, $49.00. Excellent K-22, $76.00. Many Frontiers, Autos, C. & B. Revolvers. John Smith, Rambler Avenue, Runnemede, New Jersey.

ANTIQUE AND USED FIREARMS, MOULDS, gunsmith's tools, accessories, ammunition. Send 10¢ for list. H. A. Brand, 1008 Ingalls Bldg., Cincinnati, 2, Ohio. 1-44

FOR SALE—COLT WOODSMAN, 4½ INCH barrel, very good outside, excellent inside, extra magazine, adjustable King sights, 1000 Long Rifle cartridges, $45.00. August Max Aronson, 907 Shawnee St., Pittsburgh, Pennsylvania.

ITHACA TRAP NO. 4 GRADE, 34", 14¾ X 1⅜ X 2⅜, recoil pad, gold initial plate, inlaid cheek piece, beavertail fore-end factory refinished @ $50.00. H. J. Ferry, Longmeadow, Mass.

THREE .45 COLT AUTOMATICS, GOOD, $55.00 each. Two .45 Colt Automatics, fair exterior, good mechanically, $45.00 each. New .45 Colt Automatic, National Match, $85.00. .38 Colt Automatic, good, with two boxes shells, $55.00. .32 & .380 Colt Automatics, good, late models, $30.00 each. Several .32 and .380 Colt, Savage, Mauser and Werkes, good @ $25.00 each. Excellent .44 Special S. & W. triple lock, target sights, $65.00 with one box shells. Colt .357 Officer's Model, 6" barrel, good, with 4 boxes shells, $150.00. Two Remington 12 gauge Automatic shotguns, fair to good, with 5 boxes No. 6 Western game loads, $65.00 each. Iver Johnson, S. & W. top break hammerless and hammer revolvers .32 and .38, $15.00 each. For complete list including Lugers, etc., write Elliott Gillespie, 4816 Aldrich Avenue South, Minneapolis, 9, Minnesota.

RIFLES: 52 SLOWLOCK, VARIABLE POWER scope, cheekpiece stock, $60.00. Ballard action, 52 heavy barrel, Weaver scope, $50.00. Mossberg takedown, .22 SS, $10.00. Stevens, .22 Tip-up, $6.00. Pieper imported .22 H.B. target rifle, $25.00. Stevens .25-20 Tip-up, scope, shells, tool and components complete, $40.00. Pistols: Service .45 automatic, $45.00. .25 Colt, $20.00. S.&W. .32 Long, $45.00. Stevens Tip-up, $17.00. Stoegers imported double-set trigger target, $50.00. Another single trigger model with Weaver scope mounted, $35.00. All guns with ammunition, all inquiries answered. Lt. Callar, N.T.S., Richmond, Va.

S. & W. OLYMPIC .22 L. R., 10" BARREL, custom moulded grips, perfect, $42.50. Hi-Standard Model C .22 Short, 6¾ inch, excellent in, very good out, $40.00. Iver Johnson .22 Target, 6 inch, octagon, excellent, $22.50. Model 69 Winchester .22 with 5X Winchester scope and open sights, sling, two magazines, excellent, $37.50. Sunbeam electric Shavemaster, excellent, $12.50. Hamilton 992 Railroad watch, 16 size, yellow gold, factory carton, new, $50.00. Clarence Uhl, Route 1, Wooster, Ohio.

70 WINCHESTER .257-R, 29S SCOPE, 80 ROUNDS ammunition, 20 empties, sling, new Pacific dies, $125.00. 52 Sporter, 48 Lyman, sling, $105.00. Ammunition extra. Both excellent. Woodsman low speed, excellent in, good out, holster, $40.00. Colt .32 Auto, 47 rounds ammunition, good, bluing worn, $27.50. 12 gauge S. & W. shotgun, double, collector's item, excellent out, fair in, $100.00. .32 R.F. Remington Derringer, four barrel, nickel, excellent piece, $18.00. .32 S. & W. 3", nickel, single action, spur trigger, excellent out, good in, $20.00. Bullet metal 15¢ pound. .45 A.C.P. magazine, $1.50. Ideal No. 4 tools, 41-C, Short, $2.00. .38 S. & W., $2.50. I. N. Wagner, Ashland, Ohio.

MAUSER .30-'06 CUSTOM BUILT, BISHOP stock, 24 inch, Redfield rear, fired only for sighting, $75.00. Cartridges extra. Winchester '86, .33 caliber, pistol grip, rifle butt, Lyman 38, very good, 33 cartridges, $45.00. Colt Lightning .38 Long, fair, 50 cartridges, $15.00. Belgian Frontier, double action, .38 Special, 5 inch, good, 50 cartridges, $14.00. I. J. .38 hammerless, 3¼ inch, fair, $10.00. H. & R. hinge frame, .32 Long, 6 shot, 3¼ inch, good, 18 cartridges, $10.00. S. & W. .38 hinge-frame, 3¼ inch, fair, 15 cartridges, $15.00. F. A. Baker, Donnelly, Minnesota.

PARKER 20 DOUBLE, V.H. GRADE, PERFECT, ninety dollars. Raymond Hunt, 210 Druid Hill, Salisbury, Maryland.

EXCELLENT HARRINGTON & RICHARDSON .22 Single-action "Ultra" Target revolver, and holster. Money order, $45.00. W. E. Dancy, 2008 Alta Vista, Houston, Texas.

HIGH STANDARD .22 L.R., 6½ BARREL, holster, $42.50. Remington 241 Long Rifle, excellent, $40.00. Fred Heyen, Pratt, Kansas.

HIGH STANDARD B, 6¾", PATRIDGE TARGET sights, factory new, 150 rounds, $50.00. .38-40 Colt S.A., excellent to perfect, stag grips, 30 rounds, $44.00. .45 Colt automatic, perfect in and out, Franzite grips, 150 rounds, $57.50. .38 S.&W. Special M.&P., excellent to perfect, Franzite grips, 150 rounds, $45.00. J. L. Shull, Tyler, Texas.

FOR SALE—WINCHESTER SHOTGUN NO. 21, 12X28, like new, $75.00. Schutz Binoculars 10X50 and 12X50, $120.00 each; Hensoldt 8X26 Dialyt, $72.50; Zeiss Monocular 8X30 featherweight, new $57.50. S. A. Wentling, Palmyra, Pa.

8MM. MAUSER SPORTER, GOOD CONDITION, 28-236 grain loads, $50.00. George H. Dietrich, Oriskany, N. Y.

FRANCOTTE 30E 12 GAUGE DOUBLE, 30" full, 7½ lbs., 2½X14¼, excellent, case of shells, $365.00. F. Geisselsoeder, 3814 No. 29 St., Milwaukee 10, Wisconsin.

COLT CAMP PERRY, SPECIAL 6" HEAVY BARrel, v.g., King reflector sights, Murad, $45.00. V.G. Colt .38 Super, $65.00. Almon Williams, Berea, Ohio.

OLD COLT .380, BOX SHELLS, HOLSTER $25.00. Remington .380, holster, box shells, $35.00. Remington .380, box shells, $40.00. Wm. Parker, Conway, N. H.

WINCHESTER .22 CALIBER MODEL 57, LYMAN 42W receiver sight, very good in, good out, $25.00. Wanted—Winchester 8X Riflescope for Model 75. Dr. Nothacker, 930 Louisa Str., New Orleans, La.

ITHACA 37R, 20 GAUGE, 28"M, EXCELLENT, perfect bore, 200 shells, 7&8ch., $70.00. Standard M70 Stock, cut for Lyman, $14.00. Marksman M70 Stock, for Target barrel, $18.00. Both complete, perfect. New Lyman 48, (M70) $8.50. W. H. Jansen, Nokomis, Illinois.

.357 MAGNUM, S.&W., 3½ INCH BARREL, blue, Gold front sight, U rear, very good, two boxes fresh ammunition, $135.00. Grady W. Smith, Box 16, Holly Springs, Miss.

COLT NEW SERVICE TARGET REVOLVER, 7½" barrel, chambered for .44 Russian cartridge, Patridge sights, latest model, absolutely factory condition, $50.00. Andrew Palmer, 205 Hazelwood Avenue, Bridgeport, Conn.

SELL—7.65 LUGER, 3¾" BARREL, 30 LOADS, fine holster; excellent inside, same outside except slightly holster rubbed, $40.00. Sell—High Wall .32-40, 8 loads, excellent, $25.00. Wanted—Stock for Savage 99. R. W. Winstead, Natchitoches, La.

MAUSER .257 SPORTER, FANCY BISHOP stock, new $70. .30-40 Winchester M-95 24", new barrel and stock, Lyman rear, $50. Light action Win. SS Hornet 29-S Weaver $40. Mauser 35 Whelen Redfield rear, no stock, barrel new, 40 cartridges, $50. Prewar D.W.M. Eagle Luger 6", new barrel, 100 cartridges, $50. J. R. Buhmiller, Eureka, Mont.

SELL—WINCHESTER 1895-.35, LYMAN NO. 38, bore and mechanically perfect, outside good, with twenty boxes S.P. cartridges, $75.00 prepaid. Charles Spaulding, 12 Laura St., Rochester, N. Y.

ABSOLUTELY NEW WINCHESTER 12-20, modified, ten boxes Hi-Power, seven chilled, $100.00. Excellent Colt new service .357 Magnum, shows holster wear, five boxes cartridges, $85.00. Excellent to perfect New Service .44-40, five boxes cartridges, $90.00. T. A. Wallingford, Carbondale, Pa.

.357 MAGNUM, 8⅜" BARREL, PERFECT, $95.00. Ideal tools for .32-20, with bullets, new primed cases, empties $10.00. Peter Benic, 1303 Tinkers Creek Rd., Bedford, Ohio.

REMINGTON MODEL 8 AUTOLOADING RIFLE .32 rimless, excellent, $52.00. C.O.D. $2.00 deposit. H. Hudson, 1757 Superior, Toledo, Ohio.

FOR SALE—95 MODEL WINCHESTER .30-40, inside perfect, outside excellent, receiver peep ramp front, $50.00. Edison Phonograph, 50 cylinder records, $10.00. Chas. Degolier, Clayton, Wisconsin.

REMINGTON MODEL 10 PUMP, 12-32, FULL, excellent. 50 Nitro Express 4ch., $45.00. Baker Batavia Special Double hammerless, 12-30, modern steel barrels, both full, fair plus. 50 Nitro Express 4ch., $35.00. F. A. Baker, Donnelly, Minn.

WHILE THE NEED EXISTS, WE WILL SELL your spare guns on commission. We will also clean and condition the ones you use, or make minor repairs. Military rifles remodeled. Derryhoyle House, Natick, Mass.

BROWNING O&U 12-26 SKEET, VENTILATED rib, excellent $150.00. Remington 141, .32 caliber peep rear, excellent, $72.50. Ammunition, .22 Hi-Power, .25 Remington, .30-40, .44 Russian, .38-70, .38-72, .40-60, .40-70, .40-82. High grade gentlemen's watches, $200.00 Waltham Riverside Maximus 23J. 16 size $89.50. $200.00 Howard 23J., 16 size, solid Gold case, $89.50. $150.00 Howard Railroad, 23J., 16 size, $59.50. $150.00 Howard 23J., 12 size, $59.50. Wrist watch, 21J Lord Elgin, $42.50. All excellent. Have S.&W. .22-32 and B.S.A. Hornet, trade for Antique Colts. Andrew Spina, 155 William St., Towanda, Pa.

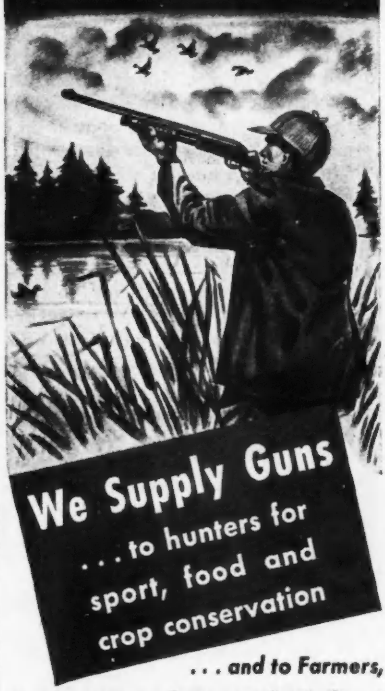
.405 CALIBER RIFLE. RIFLING AND ACTION excellent, $45.00. Two boxes shells, $5.00. E. P. Thomas, Sugar Grove, Pa.

WINCHESTER 70, SUPER GRADE, .30-'06; fitted 29S new Weaver, fine hairs; 20 110-grain Remington Hi-Speed, 80 custom loads 143-grain and 122-grain, 25 F.A. late issue; conditions excellent, $130.00. George C. Howard, Box 64, Hyattsville, Maryland.

W. J. JEFFERY & CO. ENGLISH HIGH GRADE 12 gauge shotgun. Nitro steel, 28" barrels, left full choke, right modified, ejectors, walnut straight grip stock, 2" drop beautifully engraved and checkered, and practically new, with English heavy sole leather case, $225.00. Col. S. F. Pierce, Army-Navy Country Club, Arlington, Virginia.

Serving America and America's Sportsmen with a New

WARTIME SERVICE


We Supply Guns
. . . to hunters for sport, food and crop conservation

. . . and to Farmers, Servicemen and Essential Civilians!

Most new guns are off to war, but there are thousands of good, used shotguns, rifles, revolvers, etc. stored away in attics, trunks, closets. We find them . . . buy them . . . make them available for you who need them. YOUR guns and sports equipment not now in use are vitally needed!

Last year 255,404,055 lbs. of game were bagged. If that amount could be shot this year, it would help conserve our vital meat supply. But guns and ammunition are scarce. So won't you pass along your unused ones?

Milton P. Klein

WANT TO SELL
WANT TO SWAP
WANT TO BUY ?

Guns, ammunition, reels, rods, outboards, binoculars, cameras, watches.

Get cash (name your own price) or swap for articles in our FREE Fall "Guaranteed Bargain Catalog" featuring thousands hard-to-get items; send 25¢ (refunded with first order) for handling costs. Describe merchandise fully.

KLEIN'S
SPORTING GOODS
507E South Halsted, Chicago 7

Marlin
GUN CONTEST
WINNERS

Of the several thousand participants in the Marlin Gun Contest ended July 1, 1943, the following are the winners. Congratulations! Our thanks are gratefully extended to all who entered the contest and helped to make it so successful. Chosen from among the wealth of ideas submitted are some ingenious features that will later be embodied in Marlin sporting guns. The contest reflected, moreover, the preferences of a good cross-section of American sportsmen—preferences which Marlin is taking into full account in designing its post-war production.

FIRST PRIZE

Charles E. Hoffelt
Estelline, S. D.

SECOND PRIZE

Lt. G. R. Hunter
Quitman, Ga.

THIRD PRIZE

Pvt. Geo. E. Larsson
83d Div. Artillery

14 ADDITIONAL PRIZES

Paul St. Gaudens
Coconut Grove, Fla.

James E. Nogle
Jacksonville Beach, Fla.

Louis Belanger
Montreal, Can.

Collier H. Kear
Richmond Hill, N. Y.

C. E. Reardon
Chicago, Ill.

F. E. Knowles
Taunton, Mass.

J. B. Hauer
San Francisco, Calif.

Art Dyson
Fresno, Calif.

Lt. Comdr. A. K. Espenas
Annapolis, Md.

Thaddius F. Allen
Zanesville, O.

Mervin Ruebush
Chicago, Ill.

Sylvester J. Lefebvre
Milwaukee, Wisc.

Paul McGowen
Roseburg, Ore.

Jack Mills
Wall Lake, Ia.

The Marlin Firearms Co.
NEW HAVEN, CONN.

SPRINGFIELD .30-'06 SPORTER, CUSTOM JOB, .330 Weaver, bolt sights, .45 Commercial automatic. Both excellent. Pacific tool, dies for both calibers. Quantity of components. $225.00 for outfit. Edward Sweet, Jordan, N. Y.

MAUSERS: SPANISH 7MM., $22.50. KAR '98, $28.00, Kar barrel and action $14.00. '98 barrel and action, $12.00, Krag, $25.00, Krag .22 L.R., $25.00. Ballard .22, $12.00. Schilling Mauser 8mm. $18.00. Ithaca 10 gauge, $30.00. Robert Prahar, 401 East 23 St., Brooklyn, N. Y.

SAVAGE HORNET 23D, HONED AND REbedded, with 29S Weaver, one box handloads, 50 primed cases, excellent, $65.00. One new 23D, one box handloads, 50 primed cases, $50.00. New 16 gauge, 26", Stephens Hammerless double, Model 311, four boxes shells, $34.00. Savage Model .220 Hammerless, 20 gauge, 26", new, $15.00. Wanted—Winchester 8X scope. K. K. Knight, Quaker City, Ohio.

WINCHESTER 70-'06, EXCELLENT, SLING, case, cartridges, $100.00. Colt National Match .45, excellent, accuracy job, carved holster, cartridges, $100.00. Government Model Automatic, $40.00. Springfield .30-'06, low number, serviceable, $35.00. Carl Lindahl, 205 Quincy Road, Riverside, Illinois.

FOR SALE—SMITH & WESSON K22 MASTERpiece, perfect, with embossed Heiser Holster, $60.00. F. Dwight Foster, Conover Lane, Red Bank, New Jersey.

RARE: NEWEST MODEL NO. 745 SAVAGE "Duralumin" lightweight 12 gauge Automatic, Cutts compensator, 3 tubes, pad, excellent plus, $225.00. Remington No. 11, grade "B", 12 gauge customized automatic, 32" Ventilated Super-Full Trap, and 27½" new plain PolyChoke barrel, cheekpiece, Morgan adjustable pad, sheeplined case, excellent, $225.00. Ithaca 20 gauge, new model field grade double, 28" F.&M., excellent plus, mutton case, $100.00. Money orders. Life member. Henry C. Adams, Box 114, Centerville, Iowa.

SELL—WINCHESTER MODEL 70, .257 ROBERTS Super grade, sling, Lyman 48 W.J.S., cheekpiece, factory box and grease, 10 boxes fresh 100 grain factory ammunition, beautiful walnut stock, $200.00. Winchester Model 12, 12 gauge trap, 30" barrel, full, ventilated rib, perfect, 10 boxes shells, $175.00. Winchester Model 12, 20 gauge, beavertail fore-end, 28" barrel, full, solid rib. Circassian walnut stock, 1 case shells, $150.00 perfect. Winchester Model 21, 16 gauge double, automatic ejectors, single selective trigger, solid rib, modified and full, 26" barrels, special stock, perfect, 10 boxes shells, $180.00. Money orders only. Ralph Averly, 138 E. Locust St., Ephrata, Pa.

FOR SALE—EXCELLENT SERVICE .45 AUTOmatic, arched housing, $55.00. Emil McConnell, Mt. Arlington, N. J.

1895, .30-'06 TAKE DOWN, OPEN FRONT, ADjustable rear, 24" barrel, $50.00. 1894 .38-55 carbine, beautiful chrome finish, $40.00. 1892 .25-20 octagon, beautiful chrome finish, $40.00. 1886, .38-56 carbine, magazine chrome finish, $40.00. 1876, .45-75 beautiful stock, $40.00. 1873 .32 octagon, $26.00. 1866, .44 R.F. octagon, steel finish, beautiful stock, $50.00. Model 37, 16 gauge, 28 inch single barrel, $15.00. Ward model 10, 12 gauge, single barrel, 28 inch, $15.00. Two slice chrome electric automatic toaster, new, $20.00. Charles A. Ilseman, 1150 So. Union St., Aurora, Illinois.

REMINGTON 513T, REDFIELD SIGHTS, EXcellent, $45.00. Winchester 52 H. B., latest Redfield front Marble-Goss rear, excellent, $85.00. Springfield 30" H. B. Target, Redfield front, 48 Lyman rear, excellent, $90.00. Andrew Kenney, 7913 Inglenook. Pittsburgh, (21), Pennsylvania.

SELL OR TRADE

FOR SALE—CUSTOM BUILT .22 MARTINI target rifle, genuine B.S.A. action, fancy French walnut stock, custom barrel, front and rear Metallic sights, shot less than 500 times, excellent in and out, $100 00. Or will trade for .30-'06 Sedgley Springfield Sporter or 12 gauge Browning automatic with Cutts comp. of same value. Howard Brant, Jr., 607 Self Master Pkway, Union, New Jersey.

STANDARD MODEL 70, .220 SWIFT, 57W rear, Fecker 4X Small Game scope, very accurate, perfect inside and out; Pacific dies only, length gauge, bullet seater; 60 handloads, Sisk bullets, powder, primers, $110.00. Without scope, $85.00. Fine Krag Sporter, 24 inch barrel, $35.00. Money orders only. Wanted—Good Stevens pistol, Tip-up or Offhand model. Also good or better 7mm. Mauser. W. A. Brown, 405 W. Locust Street, Rome, New York.

EXCELLENT MODEL 70 WINCHESTER WITH .330 Weaver, Stith mount, $150.00. Wanted—Empty primed 12 gauge shells. William Heckler, North Wales, Pa.

SALE OR TRADE—GOVERNMENT COLT NEW service .45, very good inside, good outside with Lawrence holster, $35.00 or Woodsman. Cecil Garner, Phelps Street, Painesville, Ohio.

WANTED—NEW NO. 48WJS FOR M70, .300 Magnum. Sale—M70, .300 Magnum stock with pad, very good, $8.00. Weston Master Meter, very good, $20.00. Hamilton 21 Jewel pocket watch, very good, cost $75.00, sell $50.00. A. C. Patton, Hutchinson, Minn.

FOR SALE—2 MAUSER AUTOMATICS, .32 caliber, new, never fired, 1 box cartridges with each, $40.00 each. Wanted—.44-40 Winchester or Marlin with full Magazine. Richard Frye, 5701 40th Avenue, Hyattsville, Md.

NEW MATCH TARGET WOODSMAN, ORIGInal box, fired 46 times, holster, $85.00 or trade for .22 L.R.'s. New Supergrade 70 Hornet, ammunition, $175.00. Korrelle II camera, case, film, excellent, $200.00. O. L. Vosburgh, Underwood, Washington.

.45 COLT GOV'T. MODEL, PERFECT WITH beautiful bluing, action tuned up, 200 cartridges, $55.00; 1000 empty .38 Spec. cases, $7.50; 1000 No. 1½ primers, $7.50; Colt Woodsman perfect with holster, $55.00; 500 FA .30-'06 cartridges 1938 and 1940, 7½ cts. each. Will trade any of above for latest 52 or 37 Model rifles, rifle or spotting scopes or trap grade shotgun and shells. Bruce W. Duddy, R. D. No. 2, Norristown, Pa.

MODEL 37 REMINGTON 03802, FACTORY grease, latest model. No iron sights, $75.00. Model 37 Remington 00652, excellent, fired 3000, factory sights and sling, $70.00. Lyman 1-A for model 63 Winchester, very good, $3.00. All C.O.D. subject examination. Wanted—Swift cases, Pacific tool. Consider model 70 Hornet, 52 Sporter or 52 Standard. Smith H. Lapsley, Box 2420, Tulsa, Oklahoma.

.30 EAGLE LUGER, V.G. OUT, GOOD IN, HOLster, $40.00; .30 Mauser pistol, excellent, rear sight catch missing, holster, $50.00; cash or will trade either for excellent .45 S.&W. M1917 or Colt M1917 .45 cal. revolver. W. O. Ludwig Olson, Ft. Crook Ord. Depot, Ft. Crook, Nebraska.

7.63 MAUSER MILITARY AUTOMATIC PISTOL, excellent. Sell $65.00 or trade for small caliber Hi-Power rifle of like value or what. Capt. Nagel, Range Office, Camp Shelby, Miss.

I BUY, SELL, OR TRADE MOST ANYTHING of value. Whit's Gun Shop, Fredonia, New York.
12-43

REMINGTON, MODEL 25, .32-20, PUMP, AMmunition, good, $25.00. Remodeled Enfield 1917, .30-'06, Marble Goss rear, ammunition, excellent, $60.00 or trade for Winchester 70, .257 like condition. Oigee 6X scope, picket and side bars reticule, excellent, $50.00. Genuine Woolrich shirt, extra heavy, red and black check, zipper, size 17, $6.00. Genuine Drybak breeches, heavy duck, size 44, $5.00. Clothing never worn. Wanted—Excellent Lyman 48 or Redfield 70 for Winchester 70. Virgil Hettinger, 11th Street, Berwick, Pa.

WINCHESTER 52 STANDARD, VAVER REAR, 17A front, perfect, $70.00. S.&W. Military target .44 Special, excellent, $60.00. Wanted—New Prewar rubber hip or storm boots, size 12 or 13. Winchester 12 & 97 Special Trap and Pigeon grades, Remington 31 and 11 Expert and Premier grades, Zeiss Deltrintem and Deltarem binoculars, Marlin 39A, Smith Crown and Monogram grades, Ithaca No. 5, Parker D.H.E. and B.H.E. Above shotguns must be perfect and 12 gauge. Sidney Nalley, Landover, Maryland.

SALE OR TRADE—NEW COLT BISLEY JUST converted last week by Pop Eimer, Joplin, Missouri, to .25-20 caliber. Handles high speed 60 grain open point ammunition 7½" proof steel barrel, banded ramp front with silver bead, U rear notch, with hi-pressure recoil-plate with firing pin to match. I will sell this beautiful gun with five boxes of ammunition for $100.00. Or will trade for fine new rifle, .357 Magnum or 9mm. Luger. Also 10 extra boxes of .25-20 ammunition at $3.00 per box if taken with gun. All correspondence gladly answered. Joseph L. Blalock, Moscow, Idaho. Route No. 2.

SELL—25 STEVENS 44½, REBORED, PERFECT in, good out, Lyman tang peep and Ivory front, $35.00. Or trade for S.&W. or Colt revolver or pistol. Herb Miller, Bay City, Oregon.

TRADE—S.&W. .38 M.&P. TARGET, PERFECT except slight holster wear, Lawrence laced-edge holster, 3 boxes cartridges for S.&W. K-22 Masterpiece or Colt M.M.T. .22 caliber in same condition. Sell for $67.00. Dies and components extra. O. L. Vosburgh, Underwood, Washington.

BELGIUM BROWNING AUTOMATIC 12 GAUGE, special grade, beautiful figured stock, perfect factory refinished and blued. Poly Choke 27 inch barrel. With shells, $85.00 or trade for 70 Winchester Hornet. Sell Perfect Colt Woodsman, 4½" barrel, $65.00, with cartridges & holster. Fred Ernst, Washington, Missouri.

ADVANCED GUNSMITHING, VICKERY, $3.25. D.W.M. 7.65 Luger, 3⅝", about excellent, $48.00. Wanted—.22 shotgun. 37 Ithaca 12 gauge barrel. Microscope, broken watches, watch tools. Si Sharp, Slatyfork, W. Va.

N.R.A. SPORTER, SPLENDID CUSTOM STOCK, poor buttplate, gold bead, excellent in, very good out, with 80 cartridges. First $120.00 money order. Wanted—Pump or auto. 16, 26" modified, good. Von Linden, Rensselaerville, N. Y.

FOR SALE OR TRADE—ONE .22 REMINGTON Rolling Block action pistol. Barrel 10 inches. Barrel made by Diller, wood work by States, a beauty. Very good. 300 shells, $60.00. One .44 S.&W. Special, Target sights, 50 shells. Very good, $60.00. Smith Comb. Welding and cutting torch, life time handle, good condition, $35.00. L. Howe, Kenton, Ohio.

USED MODERN AND ANTIQUE FIRE ARMS, bought, sold and traded. Write me your wants, what you wish to sell. Do not ship unless notified. Large catalogue of fine arms available, send 25¢ in coin to cover costs, same will be refunded on first order. Trembly Arms, 106 Andover St., Lawrence, Mass. t.f.

FOR SALE—WESTLEY RICHARDS DOUBLE; 12 gauge, 30 inch barrels, both full choke; engraved action, automatic ejectors, single select trigger, Circassian stock, $300.00 cash. Will accept .270; 6.5 Mannlicher; 2R Lovell, or other fine guns on trade. Dr. Gilbert Hoppenstedt, 709 York Road, Towson, 4, Md.

SELL OR TRADE—TROEMNER ANALYTICAL Balance, weights, $125.00; 7.63 Mauser pistol, clips, 90 rounds, $60.00; 4000—5" Lag Screws, new, lot $100.00. All letters answered. R. Bittinger, Apt. C-7, 619 E. University Ave., Ann Arbor, Michigan.

FOR SALE—SWISS MARTINI SCHEUTZEN rifle, caliber .32-40, 30 inch half Octagon Tapered No. 3 barrel, Scheutzen buttplate and stock, cheekpiece, set triggers, side lever action, gun in excellent condition, Ideal No. 6 loading tool for .32-40 and 20 Winchester factory loaded shells. Case with gun, all for $80.00. Will consider good handguns in trade. 350-10 gauge empty primed shells, powder, wads, and shot and loading tools for 10 gauge all for $20.00. George W. Heim, Chandler, Indiana.

NEW .38 SPECIAL SMITH & WESSON 2 INCH, will trade for S.&W. Magnum or K-22 masterpiece. 1917 Colt .45, excellent, $40.00. .45 automatic commercial, $50.00. S.&W. .22-32 target, good, $45.00. Greener 10 gauge hammerless double, lifetime model, 100 shells, $100.00. Cost $475.00. Greener 8 gauge double hammerless, far-killer model, new, unfired, modern gun with box shells, $100.00. Cost $400.00. Warren Baker, 5106 Liberty Ave., Pittsburgh, Pa.

ORIGINAL C.E. FOX 12, $165.00. LUGER CARbine, no stock, $115.00. Schultz Binoculars 10X50, $95.00. Woodsman 4½", $60.00. Hi-Standard 4½", Short, $37.50. Winchester 5A, $45.00. Two Krags remodeled. Extras with all above. Three Springfields .45-70, $7.50 each. Ballard .32-40, $20.00. Bisley, $20.00. Two S.A., $25.00 each. 1917, $35.00. View camera, $40.00. 1933, .30-'06, $5.00 hundred. Wanted—D.H.E. Parker 12 or 16, single trigger, Imp. cylinder & modified, Weaver .440, late Evinrude 10. Will trade. R. Sheeler, 2421 W. Broadway, Council Bluffs, Iowa.

EXCELLENT ACE, $85.00. IDEAL LUBRICAtor, .38S, $10.00. Ideal Tool, .38S, $6.50. Colt OMT, .38S, HB, VG, $55.00. B&M No. 28, .30-'06 tool, $14.00. .45 US Auto., VG, $55.00. Winchester 12, trap, 30" barrel, two stocks, solid rib, excellent, $85.00. Kleanbore L. R. Wanted—Potter B. Furnace, South Bend 9" lathe, W52 Sporter, Star Tool, W64 Deluxe .30-30, W94, .30-30 and ammunition or empties, Outdoorsman .38-44, No. 1½ small pistol primers, issue Enfield, Krag .22-45 conversion, W70 Deluxe, .30-'06, S.&W. Magnum, .22 L.R. Hornet ammunition and tools, .30-30 ammunition and tools, Potter .30-'06 and Hornet dies. Almon Williams, Berea, Ohio.

COLT D.A. .45 PHILIPPINE, NICKEL PLATE, good, $30.00. Winchester Carbine 83, .45-90, good, $30.00. 9mm. Lugers, $45.00 to $55.00. Winchester 12-12 F. F., trap, solid rib, very good, $80.00. Parker DHE, 12 F. F., very good, $170.00. Parker VHE, 20 F. F., very good, $145.00. WANT—10 gauge hammerless double, Colts preferred. Robert E. Seiter, 1510 Linden Road, Homewood, Illinois.

S. & W. .357 MAGNUM, 6½", SANDERSON Thumbrest stocks, swivel, excellent. Heiser holster, 275 factory loads, $120.00. Want—Kit gun, M. & P., 4" or 5". Harold Loomis, Gouverneur, N. Y.

IMPORTED MAUSER SPORTER 6.5MM. RAMP, Lyman, sling, set trigger, hinged floorplate, 160 soft point cartridges, empties, case, die, primers, powder, excellent plus, $137.50. Wanted for a Lieutenant in Airforce for overseas duty, excellent Smith & Wesson .357 Magnum, under 4½ inch barrel, cartridges. List for stamp. Huizenga Gunshop, Zeeland, Michigan.

24 VOLUMES ALEXANDER HAMILTON INSTItute Modern Business, excellent, cost $60.00, take $25.00, or trade for antique guns. Trade only, 1000 rounds .22 LR for .218 Bee Cartridges or components. Paul Winters, New Philadelphia, Ohio.

BAUSCH & LOMB 7 X 35 BINOCULARS, C.F., with case and straps, excellent, $150.00. Winchester 70, .30-'06, Redfield Jr. Mount, Weaver 29S scope, post, perfect, $150.00. Plenty ammunition, extra. .22 Long Rifle cartridges will trade for what have you. J. G. Mundy, 432 Andrews Avenue, Glenolden, Pa.

CROSMAN .22 REPEATING AIR RIFLE, 3500 pellets, excellent, $15.00. Wanted—.45 automatic, choke barrel for 16 gauge Remington automatic. George Gustin, 1471 Vernon, Wabash, Ind.

The "Pacific" Tool and the War

When inquiring about or ordering a "Pacific" Reloading Tool, if the tool is to be used in the war effort in any way, please give us the details, because essential war work must be taken care of **FIRST.**

Send for the "Pacific" Handbook—a most valuable book for a shooter to have for future reference. It shows practically every sight—gives practical reloading and remodeling information—describes and illustrates all types of shooting accessories—136 pages—over 700 illustrations. **Most of this material is not available now.** Send 20¢ which partially covers cost of publishing and mailing. (Requests from Canada should send 25¢.)

FREE—Send for Special Free Circular on Reloading

PACIFIC GUN SIGHT CO.
353 Hayes St., San Francisco (2), California

PACIFIC GUN SIGHT CO.

SELL OR TRADE—REMINGTON SPORTSMAN, 16 gauge, 28 inch full, perfect inside, excellent outside, $60.00. Remington 5 shot, Model 11, automatic 12 gauge, 28 inch full, $45.00. Remington automatic rifle, .35 caliber Model 8, good, $50.00. Western Field, .22 rifle, tubular magazine, very good, $14.00. Savage automatic pistol .32 caliber 4" excellent, $24.00. Another very good $20.00. Barrel for Remington Model 11, 12 gauge, 28 inch full with extension, very good out, fair inside, $10.00. Vest pocket Kodak, leather case, very good, $5.00. Wanted—63 Model Winchester .22 Long Rifle. L. M. Kelso, Box 321, Rocky Ford, Colo.

.22 SAVAGE MODEL 6 AUTOMATIC, VERY good, 1M, L.R., $66.50. Stevens Springfield 20 gauge single, new, factory carton, case shells, $75.00. 100 A.C.P. $6.00. 240-.300 Magnum, Peters 225 gr. Belted $40.00. 400 .32 Remington 180 grain Peters, $50.00. No splits. F.O.B. Wanted—Perfect MT Woodsman and .22 Shorts. J. G. Griffith, 4600 Kensington, Tampa, 6, Florida.

FOR SALE—PARKER VH 12-28", CYLINDER and modified, standard stock, $75.00; Remington automatic 20-26" cylinder, 225 new Kleanbore 8s, $59.00; both excellent in, good out. Lyman 438, ¼" click mounts, excellent, $25.00. Hartman trunk case for 52, very good, $10.00. Wanted—Winchester 70, any grade or caliber, with cartridges; Springfield Armory Sporter. C. H. Cubbedge, Orlando, Florida.

VERY GOOD 2R LOVELL, 44½ D.S. ACTION, heavy barrel, dies. 29S, B mounts, components, $70.00 or .22 caliber automatic target pistol and ammunition. Chas. Cartwright, 4 East 8th, Coffeyville, Kansas.

.45 COLT AUTOMATIC, GOOD, $48.50. .22 Remington automatic Short. Special checkered stock, good, 100 rounds, $42.50 or trade. 4½" Woodsman. W. E. Collier, R-2, Box 395, Clayton, Missouri.

SWAP GUNS AND AMMUNITION, OR GET cash. Name your own price. We pay more, sell for less, because we handle thousands upon thousands of new and used guns from $5.00 to $1000.00! All models, gauges, calibers, makes. We also buy, sell or trade ammunition, reels, rods, outboards, binoculars, cameras, watches. Write, describing what you have to trade, or sell for cash. "Money Back Guarantee" backed by 58 years' fair dealing. Free Fall "Guaranteed Bargain Catalog" featuring thousands guns and "Hard-to-get" items; send 25¢ (refunded with first order) for handling costs. Klein's Sporting Goods, Milton Klein, President, 501E, South Halsted, Chicago.

MORTIMER & KIRKWOOD 10 GAUGE PERfect, 5 boxes shells, $100.00, cash or trade for Winchester 52 or 75 Sporter. R. A. Compton, 902 Mulbery, Mt. Carmel, Illinois.

JOHNSON LOVELL, 2-R, HEAVY BARREL. Remington-Hepburn revamped action, thru bolt, fully curved grip, shortened upper tang, scope height stock, beavertail forend, stump walnut. Ebony grip cap, buttplate and forend tip. Weaver .330-C scope, Lee floating dot, Albree Mono-mount, Whelen sling, Q.D. swivels. Johnson die, Pacific bullet seater and shell holder. Perfect inside, excellent out. Scope perfect inside, good outside. 5,000 Western 6½ primers. 2200 Sisk bullets, 35 to 55 grain, 100 Winchester 46 grain H.P., 100 primed cases, 85 loads. Ten pounds 4198, 1¼ pounds 2400, pound Lightning. All $225.00. Will split for trades. Accept Savage 99, .300, Winchester 70-'06, .270, .257, N.M. Springfield, high number, Springfield M-2, etc. Must be excellent or better and include some ammunition. Trades on basis of current values with cash difference either way as warranted. No telegrams. No replies until October 15th. F. A. Wiard, 2315 Harding Avenue, Muskegon, Michigan.

K-22, EXCELLENT TO PERFECT, SUPER TARget sights, V-rib, red reflector front, micrometer rear, cockeyed hammer, honed action, all by King; grip adapter, sheepskin holster, 500 Kleanbore Long Rifle, $75.00. Colt Detective Special .38, perfect, Myres holster, 100 Kleanbore Wadcutters, $45.00, or will trade latter gun for excellent S.&W. Model '17 Army .45. Robert E. Byrne, 1855 E. Main Street, Madison, Wisconsin.

A PERFECT BORE

Only perfect cleaning can keep a gun bore perfect. Use the gun cleaner that protects firearms from rust—

FIENDOIL

GUN CLEANER

It eases cleaning to a jiffy job, chemically removes fouling, and coats the metal against corrosive moisture. For all climates—

Get FIENDOIL Now in the New 2 oz. bottle

35¢

McCAMBRIDGE & McCAMBRIDGE CO.
BALTIMORE

SELL OR TRADE—WINCHESTER MODEL 21 Skeet, 12 gauge, pistol grip, selective single trigger, selective ejectors, beavertail forearm, Jostam pad, excellent, heavy leather case, very good, $105.00. Wanted—Excellent Winchester Model 12 Skeet, 16 gauge, matted rib, Poly Choke; Fecker or Lyman, 6X scope and mounts. Stamp Please. Andy Gault, Box 518, Laredo, Texas.

WANTED—SMALL CAMERA, BINOCULARS; 8mm. projector; pistols. Have new 16mm. Eastman Camera, $42.00; New double barrel 12, $39.00. Stamp collection, $50.00. Trumpet, excellent, $29.00. Will trade. S. de Ranitz, Prairie du Chien, Wisconsin.

SELL OR TRADE—FINE SPRINGFIELD (3 IN 1) tubular automatic, shot under 500 times, with new Weaver mounted, 800 Long Rifles, 200 Longs, all fresh Hi-Speeds, $59.50 complete. Good used pocket knives. Prewar standard makes, 69¢. State approximate style. Wanted—Bolt action Hornet with ammunition and/or components, tools. Wouid pay cash or cash difference. B. Johnson, 314 Jackson Street, Hattiesburg, Mississippi.

23 A.A. SAVAGE SPORTER. PERFECT IN, very good out. 200 cartridges, $28.00. Winchester 8X scope and bases. Perfect optically, good out, $11.00. Targetspot bases and screws for Mod. 70, $3.00. Trade 200 factory Hornets for 1000 Supermatch Mark 11. Howard E. Neff, 326 W. 15th, Marion, Indiana.

OFFICIAL

SEND FOR FREE New Illustrated Folder & Price List

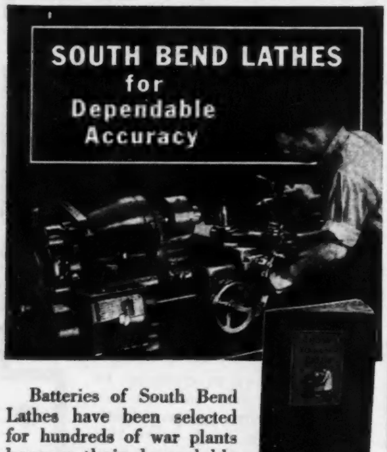
Official N.R.A. Targets
LITHOGRAPHED

LOOK FOR THIS SEAL

A marksman can't depend on a leaky boat when he is duck shooting. Neither can he depend on inaccurate targets when he is practicing. Official N.R.A. Targets assure you of true scores . . . yet they cost no more.

- Non-glare bull's-eyes
- Crisp white rings
- Sharp, clean bullet holes
- Positive Uniformity

NATIONAL LITHO CO. 1255 25th St., N. W., WASH., D. C.



Batteries of South Bend Lathes have been selected for hundreds of war plants because their dependable accuracy assures continuous trouble-free production hour after hour, day after day. They will be easily convertible to peacetime production. Available in five sizes, 9" to 16" swings. Write for catalog.

"HOW TO RUN A LATHE"
A 128-page book on lathe operation and care. Size 5¼"x8". Price 25c postpaid.

SOUTH BEND LATHE WORKS
South Bend, Indiana Lathe Builders For 36 Years

PARKER DOUBLE, .12-30, M.&F., CASE, EXcellent $52.50; Weaver .330 C, Crosshair, excellent, $30.50; Winchester 70-.30-'06, W.J.S., cartridges, components, perfect, $115.00; Sorenson scope mount W70-Alaskan, $11.50; Bishop stock, W70, $3.25; Wanted—.270, .280 or .300 Magnum, plus tools and components; Binoculars; Redfield Junior for Winchester 70 Alaskan. Curran Bashore, Mifflintown, Pa.

.38 SPECIAL S. & W. HOLSTERS, AMMUNItion, very good, $52.00. Enfield Sporter, barrel and action white, 29S, about 200 rounds, $87.50. Remington Sportsman 12 gauge, very good, $75.00. Model 12 ribbed, excellent, sheep case, $85.00. Want—Small Johnson or Evinrude outboard. Dale Weeks, Belle Fourche, South Dakota.

SAVAGE .300, EXCELLENT, AND 4 BOXES shells, $75.00. 7mm. Mauser, 4 boxes shells, very good, $75.00. Wanted—Double adjustable chamber for Ideal tool 7mm., neck resizer, 57 Lyman for 70. Frank Riddle, 214 Imperial St., Oil City, Pa.

M52 STANDARD, LATEST, 48 AND 17A, NEW, with sling $62.00; 8X Junior Targetspot, A-1 $60.00; Savage 23D Hornet, 438 scope, sling, fair, $35.00; .22 Marlin automatic, with carrying sling, new, $18.50. Trade—800 rounds .38 ball and .30-40 Krag for Hornet ammunition. Only stamped envelopes answered. M. E. Ripplinger, 3rd and Cass Sts., La Crosse, Wisconsin.

M70, '06, EXCELLENT, .330 STITH MOUNT, Lyman 48, perfect, sheepskin case, sling, components, cases for 130, 20 factory, $150.00. 6X24 Hensoldt Wetxlar binoculars, perfect, case $75.00. Trade—46 grain Hornet H.P. bullets for 55 or 63 grain Sisk or equivalent S.P. Fred Granger, 726 Kenwood, Burbank, California.

WANTED—COLT MATCH TARGET WOODSman with extra clips, shells and holster. Will pay $70.00 for right gun. Also want Hi-Standard Model D or E, preferably with 4½ inch barrel. Will pay up to $60.00. For Sale or Trade for above guns; Revere 88, Wollensak F2.5, leather carrying case and Omag sunshade and Filter Kit, $60.00. Also Leica Chrome Model G Summar F2, 50mm. carrying case and various filters and sunshade. $250.00. Also Thambar F2.2, 90mm., Elmar F4.5, 90mm., Hector F6.3, 28mm. and Vidom Viewfinder. All cameras etc. in excellent to perfect condition and one Old Elmar F4.5 135mm., poor, $30.00. Also for sale Winchester Model 74 L.R., perfect, $20.00. Reply to Private John W. Hornor, Jr., Station Hospital, Fort Devens, Mass., Life Member N.R.A.

FOR SALE—S.&W. MAGNUM, 6½" BARREL, perfect, red bead sight, $150.00. Money order only. Wanted—Cutts .680 full tube .25 caliber, Model 9, Walther automatic. Also Arminius Match pistol. Each must be excellent. James Townsend, 2545 Procter, Port Arthur, Texas.

FOR SALE—MARLIN 39, 1897, 1892 WITH brand new barrels, latter shot 430 times $30.00, $25.00, $20.00 respectively. Marlin 90, .410-.22 Hornet and 43 cartridges, perfect $45.00. Heavy Remington Hepburn .22, bore perfect $25.00. Want—Powder scales. George Schmeling, Germantown, Wisconsin.

1200 NO. 4 WINCHESTER PRIMERS, $7.20. 1400 "new" No. 4 Winchester Primers, $8.40. 2000 No. 6 U. S. Primers, $12.00. 2500 No. 4 U. S. Primers, $15.00. 1700 No. 5½ Winchester Primers for .32 Special, $17.00. 300 No. 5 Winchester Primers for .25-35 and .30-30 cartridges, $3.00. All above primers are old type in very good condition and in original packages. 400—.30-'06 cartridges, 1918 issue @ .05 each. .44-40 Heavy Break Open Belgian revolver, very good, $18.50. .38 S. & W., Safety Hammerless, pearl stock, excellent, $25.00. 12 gauge L. C. Smith, Field, 28", M. & F., S. S. Plane, Gold B., as new, $55.00. 12 gauge "Springfield" M. & F. excellent, wood finish scratched. $30.00. Colt P. P., .38 caliber, pearl grips, excellent in, very good out, $37.50. Webley Revolver, .455 Mark III, excellent, $35.00. .22 Colt M. T. Woodsman, Tenite thumb rest grip, extension for palm, excellent in, blue worn near muzzle where weight was taped on, $69.50. .38 S. & W., I. J. blued, 4½" barrel, very good, $16.50. .45 Colt N. P. commercial, excellent, $57.50. Send dime for list. Money orders and certified checks only. We buy, sell and exchange. What have you? Gruener Hardware Store, Inc., 85 Main St., Fitchburg, Mass.

FOR SALE—RUSSELL-CHIEF BOOTS 8½EE, Height 12", worn 4 times like new, $18.00. 6X24 primim binocular, Roth, Berlin, sole leather case, $30.00 new. Sanderson Woodsman grips, thumb rest, medium size $5.00. Shipped C.O.D. examination $1.00 deposit. Wanted—.22 No. 4 Remington S.S. rifle. Ed L. Ahern, Box 321, Clinton, Tenn.

W70, .220 SWIFT, EXCELLENT, FIRED 70 rounds, 300 assorted factory cartridges, $120.00. Trade—.22 Shorts; Long rifles; .250-3000 or 20 gauge for .22 Hornets. Empties; 75, .250-3000; 70, .220 Swift @ 4¢. John Borland, Emlenton, Pa.

WINCHESTER HB52, VAVER FRONT, REAR sights, shot less than 2000 rounds, numerous accessories, ammunition $90.00; Iver Johnson .22 Target pistol, Model 834. Shot less than 50 rounds, with holster, $40.00; Colt Woodsman, excellent, $30.00; 6 volt gasoline generator set, $35.00; all kinds machinist tools and equipment. Will take Winchester 75 or .22 Target pistols in trade. Charles Fornsel, 1866 Palmetto Street, Brooklyn, N. Y.

SALE OR TRADE—BROWNING O.&U. LIGHTning, 28" ribbed, I.C.&M., S.T., excellent plus, $115.00. Woodsman magazine, $1.50. Krag-26", good. Ideal reloading tool. Bullets, primers, powder, 20 Kleanbores, $45.00. Trade only. Late issue .30-'06, up to 300, on equal number 12 or 16 gauge. State loads. F. C. Culler, Alliance, Ohio.

EXCELLENT HI-STANDARD AUTO. PISTOL, Model B, 6¾ barrel with holster and 1000 Kleanbore cartridges. Wanted—.250-3000, or Winchester 64, or $65.00. Vince Eckel, 7705 Kyle, Tujunga, California.

WINCHESTER .22 SHORT MUSKET, LYMAN No. 41 receiver sight, blade front, bore fair, rest good, strap and 200 .22 Shorts, $18.00. U. S. engineers compass, excellent, $5.00. Trade both for 500 .22 Hornet Soft Point cartridges, or ?. Raymond Martinson, Suttons Bay, Michigan.

AUTOMATICS, REVOLVERS, SHOTGUNS, rifles for target, defense, hunting, bought, sold, traded, including selection of Woodsmans and High Standards, ammunition available with guns. List ten cents. Rudolph's, Atchison, Kansas.

COLT OFFICER'S MODEL .22 TARGET, VERY good plus, Murad grips, sheepskin holster, 300 Kleanbore cartridges, $65.00. Mossberg 20X scope, excellent, $20.00. Ranger .22 L.R. tubular auto. rifle and case, excellent, $20.00. Wanted—.250 components. Vince Eckel, 7705 Kyle, Tujunga, California.

SPRINGFIELD .30-'06 SPORTER, $85.00. KRAG, Lyman 48, $62.50. Enfield, Lyman 48, $65.00. Mauser .35 Remington, $100.00. Sukalle barrel, Redfield safety, Redfield 70, Mauser, .300 Savage caliber, $55.00. Above four have Mannlicher type cheekpiece and pistol grip stocks, ramps, gold beads, slings, all excellent to new. Krag 30", excellent. 100 F. A., $42.50. S. & W. 1917 and S. A., .38 Special, like new. Ammunition .45 Auto. .30-'06, .30-40, 7.65 Mauser, 405 Winchester. Want—.300 Savage, 35 Remington Ammunition, Pacific Dies, .300 Savage, .35 Remington, .44 Special, .357 Colt, S. A., .38 Special cylinder new, for same in .44 Special. L. E. Norman, 1366 F St., N. E., Washington, D. C.

FOR SALE—WINCHESTER MODEL 95, .30 Gov't. .03, good condition, with some ammunition. $30.00. Wanted—Model 75 Target rifle, also Short Mauser action. George Skewis, Scotch Plains, New Jersey.

SAVAGE MODEL 45, .250-3000. VERY GOOD. Shells, extras. Inquire, $85.00. Springfield .30-'06. 22" barrel, good, $6.00. WANTED—Mauser 98 Bolt Complete. P. Daubenspeck, Emlenton, Pa.

WINCHESTER 54, .30-'06 CUSTOM STOCK. 48 Lyman, excellent, $90.00. Winchester 54 Hornet. Weaver 6 power, excellent, $85.00. Johnson Martini, .22 Match, $100.00. Mannlicher 6.5mm. carbine. Kahles 4 power scope, $150.00. Winchester 52 Sporter, Weaver in B mounts, excellent, $165.00. Rigby .450 double rifle, $250.00. Mauser 8mm. carbine, set trigger, Mannlicher type stock, $80.00. Mauser 9mm. rifle, ribbed barrel, $125.00. Haenel 9mm., set trigger, ribbed barrel, $85.00. Also a number of good revolvers and auto pistols. Will trade for fire arms, cameras and binoculars. The Gun Shop, 106 E. Market St., Louisville 2, Kentucky.

FOR SALE OR TRADE—CUSTOM .30-'06 Springfield Sporter, engraved, ramp bead front, B.&M. sleeve peep, 100 rounds, excellent, $125.00. Trade for antique Colts. Andrew Spina, 155 William Street, Towanda, Pa.

FOR SALE—.32-40 WINCHESTER RELOADING tool and mold, excellent, $6.50, 18 empties free. 100—.32-40 cartridges Winchester Staynless, $4.00 for 20. Ranger 4X scope (post) optically excellent. No blocks, click mount, $11.00. Wanted—Good .25-20, '92. Konrad Hartbauer, Boundary, Washington.

.45 AUTOMATIC, COMMERCIAL, EXCELLENT, holster, extra magazine, 150 cartridges: $75.00: .300-.25-25 cartridges; $10.00 hundred; "Criterion" reel, $7.50; List camera accessories for stamp. Wanted—Colt No. 3 Derringer; poor Frontier. E. F. Brandt, St. Augustine, Fla.

TRADE

WANTED—VERY ACCURATE WINCHESTER 70. .257 Roberts, components. Cash or trade. Have excellent 70, K-Hornet, lots components. Winchester 12-12-27, Poly Choke, 16 boxes Shurshot. New Shakespeare, perfect reel, 5' True Temper rod. Joe Ivy, 1610 Mountain Lake Road, Dallas, Texas.

TRADE—NEW MATCH TARGET WOODSMAN advertised elsewhere, this issue, for Shooting Master, .357 S.&W. Magnum, Outdoorsman, 52 Sporter, in same condition. New Supergrade 70 Hornet for Supergrade .257, .270, same condition. New Pacific tool and SX Hornet Dies for .22 L.R.'s. O. L. Vosburgh, Underwood, Washington.

TRADE—ARMY .45 AUTOMATIC, GOOD, FOR 63 Winchester automatic, 1½ primers or .25-35 bullets for .22 caliber Gas checks. LeRoy Goodwin, 300 Lamar, Amarillo, Texas.

TRADE—KRAG CARBINE, GOOD, REDFIELD sights, 32 cartridges. Wanted—Winchester 64, .25-35. Frank Widera, Rio, New York.

.357 MAGNUM. COLT SAA 5½", PERFECT, 100 cartridges; for .22 ammunition or? W. Hunt, 600 First National Bank, Minneapolis, Minn.

COLT KING .44 SPECIAL NEW SERVICE, SPEcial 2" barrel, with primers and reloading tools. Wanted—S.&W. kit gun. Robert W. Knight, Seneca Falls, New York.

TRADE—.25 COLT AUTOMATIC, BARREL very good, bluing gone; for 1X Weaver scope with shotgun mounts. Frank Randall, Green River, Wyoming.

TRADE—FOX STERLINGWORTH, EXCELLENT. Colt S.A.A. .38 Special, excellent or better, ammunition. What have you? J. A. Evans, Rector, Arkansas.

TRADE—BOND LOADING TOOL SET. .30-40 Krag, B.&M. mould 169-G.G.C. Wanted—Good .22 automatic Remington rifle. Earl S. Ross, Medina, New York.

TRADE—33 POWER VION DRAWTUBE SPOTting scope, inside excellent, outside good, for excellent Winchester 75 sporter or excellent Colt Woodsman. Write offer. Tom Logsdon, 7045 5th Avenue, Los Angeles, California.

TRADE—WINCHESTER .30-30-94, EXCELLENT. or 12 gauge Western Field pump, excellent. Wanted —.270 Winchester. Edward Kleinman, Ellenville, New York.

TRADE — NEARLY COMPLETED ENFIELD sporter, for Savage 23 Hornet. Details on request. E. D. Huff, 98 Carroll Avenue. Bridgeport, Conn.

TRADE—WINCHESTER 52 BULLGUN, CUSTOM stock, perfect, for late Targetspot or Fecker large objective, consider Hensoldt or Zeiss. O. F. Bauer, Star Route, Pomeroy, Ohio.

TRADE—LATE MODEL VACUUM TUBE TONE control, hearing aid, new condition, reasonable, for equal value high quality modern guns. Correspondence invited. Will pay any reasonable price few boxes Hornets. Paul Bossemeyer, 830 State Life Building, Indianapolis, Indiana.

TRADE—COLT WOODSMAN, CUSTOM AND factory grips. Very good plus. For Remington 513 T in same condition. Will sell for $45.00, prefer trade. E. H. Thompson, 1501 13th Street, Altoona, Pa.

.38 S.&W. COMMANDO, NEW SANDBLAST FINish for K-22, pay difference.. N. Gorham, 2118 Edgebrook Ave., Station 26, Pittsburgh, Pa.

HAVE TWO RIFLE SCOPES. WANT MAUSER 98 action or Winchester 70 for .250-3000 Savage. Joe Fingal, 414 Maryland Ave., Wilmington 55, Delaware.

TRADE-REMINGTON AUTOMATIC 12 GAUGE, 26" cylinder for Lyman Junior Targetspot. Frank Russell, Plainfield, Indiana.

.22 O.M. COLT, EXCELLENT, FOR .250-3000 Savage, 257-70 or your offer, guns only. John Culbertson, 194 Ave. 64, Pasadena 2, California.

TRADE—COLT AUTOMATIC .45, GOOD, BARrel fair, flap holster, 3 clips, carrier, new shoulder holster, 400 cartridges. Wanted—Remington or Browning automatic 12, 16 very good with Poly Choke, cash for shells. Trade—Duratron hearing aid, perfect, custom ear mold case, new batteries, or sell, $100.00. M.O. Wanted—Remington 81, 30S, caliber .25, .300, .257, very good Noske scope preferred, cartridges, some cash if warranted. Letters answered. D. H. Saeger, Jr., 88 1st Street, San Francisco, California.

TRADE—8X24 MIRAKEL DAYLUX. 500 Western .22 Long Rifle. 100 .30-'06 M1 for 40-8X57mm. S.P. Pair Army Officer's dress boots, size 7C, pair field boots 8D, Officer's blouse, chest 38. Complete blue dress uniform Vet. Corps. (Med. Dept.) All either new or very good. Wanted—Savage 99T or K .300. Mauser Short action, .250 or .300. Winchester S.S. .30-40, Mauser carbine, ammunition with gun. Describe fully. Dr. Fred Herring, Pine Grove, Pa.

TRADE—NO. 116 PRIMERS FOR REMINGTON No. 57 and Peters No. 4 shotgun primers. Wanted—For cash or trade. .32 Winchester self-loader, cartridges and cases. .22 caliber, .25 caliber, .32 caliber. Hollow Point bullet moulds. Have guns and components to trade for above. State your needs. Otto C. Schmidt, Rt. 2, Box 434, Fort Worth, Texas.

TRADE—HAVE FAIRBANKS NO. 3054 SCALES, Ideal No. 10 tool with dies for .257 and .30-'06, Long Rifles, 6 boxes factory Hornets, 35 grain Sisk bullets. Wanted—12 gauge shells, B.&M. powder measure, 50 grain Sisk bullets, 60 and 87, .257 bullets, large and small rifle primers, 2R cases, Winchester or Western 220 cases. Fenton Priest, 903 Hanover Ave., Norfolk, Va.

M70 WINCHESTER, .30-'06, PAD, LYMANS, with 240 factory loads, Kleanbore; .22 L.R. ammunition; Hornet and .30-'06 empties. Wanted—12 gauge pump, Poly Choke, no rib. Thur Smith, Newark Valley, N. Y.

TRADE—.32 LONG COLT POCKET POSITIVE, excellent, 100 rounds ammunition for .22 Colt Woodsman or what have you. Lawrence Phillips, Vevay, Indiana.

TRADE—ISSUE SPRINGFIELD FOR MODEL 70 rifle or good double 12. Webley and Son fine 10 double for fine 12 double. E. Henke, 559 So. Evergreen, Ventura, California.

COLT WOODSMAN, 6 INCH BARREL HAS KING balance weights and King action. Regular and target grips. Will trade for .22 Long Rifle cartridges. This gun is excellent plus. O. N. Gregg, 4241 Troost Avenue, Kansas City, Missouri.

WILL TRADE—200 REMINGTON 110 GRAIN .30 caliber O.P. bullets for 400 large rifle primers, size .210, nonmercuric, any make. James Havel, Thief River Falls, Minn.

TRADE—PERFECT M70, .257 COMPONENTS (600), tools. Want—same in .270 and Hornet. Consider trading or buying separately, components, guns, tools. Jack Potter, 721 F Alicia Walk, Akron, Ohio.

TRADE—1917 COLT, SLIGHT ROUGHNESS INside, fair out, mechanically excellent. Want—Good Bisley or Frontier. Evin Armstrong, Box 99, Camen, Michigan.

TRADE—40-.30-30, 40-.25-35, 20-.300 SAVAGE, 29S Weaver, new with TT03 mount. Complete unit for Woodsman or .38 excellent or better. H. Walters, 4520 West Pine Blvd., St. Louis, Mo.

TRADE—COLT .380 AUTOMATIC, EXCELLENT for Colt .22 match. Pay difference. Ray Robertson, Republic, Mo.

K-22 AND .38-44 OUTDOORSMAN, AMMUNItion, excellent. Wanted—.30-'06-.300 Magnum, .250-3000-.257, High Grade binoculars or what? Amos Wells, Route 4, Albany, Oregon.

CASH OR .257 AMMUNITION FOR EXCELLENT one to two horsepower outboard motor, large rifle primers. Frank Harrison, Rt. 2, Box 288-F, Charleston, S. C.

TRADE—ENFIELD SPORTER. THREE ANtique pistols. .30-'06, .45, .22 cartridges. Felix Phillips, 1508 Clover, Amarillo, Texas.

TRADE—.300 REMINGTON AUTOMATIC FOR Remington 12 automatic. E. H. Harding, Crookston, Minn.

TRADE—.45 AUTOMATIC, SHOULDER, ISSUE holsters, clips, extras. $200.00 Ludwig banjo. Wanted—B.&L. 65mm. 25X. Noske or Lyman 2½X, Springfield mounts. J. Warren Magee, Box 666, Bishop, California.

TRADE—DUNLAP MODELMAKERS LATHE. Thread cutting model complete with back gears. 24" bed, new condition, for perfect or excellent Winchester 70-'06 O.T. .270 or 99R .300 Savage, with shells, preferably with scope. Pay cash difference. James Van Keulen, Box 110, Lakeview, Oregon.

ONE PERFECT .30-'06 D.C.M. SPRINGFIELD Sporter stock as issued. John McClintock, 4817 Walnut Drive, R-2, Pomona, California.

TRADE—CONTAX CAMERA, ZEISS JENA 1:2.8f —5CM, everyready case, excellent, for M70-'06 or .270 with telescope. Robert Benlow, Gerberville, Calif.

WANTED

WANTED—WINCHESTER HIGH-WALL, ALSO low-wall S.S. action for personal use. Complete description & price first letter, please. Paul McQueen, 707 Setliff, Nashville, Tenn.

WANTED—WEBLEY MARK II SERVICE AIR rifle, .177 only. Pickert "Arminius" pistol. Walther HP Army. Walther P.P. or P.P.K., any caliber. .41 Remington derringer, blue. All very good or better. Describe fully. Halford Lembke, 318 Oceanic Bldg., Seattle 1, Washington.

SUPER STOCK FINISH

—and filler. A beautiful, tough, durable oil type finish; will not scratch. Prevents warping by sealing out moisture and oil. Less than half the time required. Finish $1.50. Filler $1.50—both for $2.50. Enough for several stocks.

MASHBURN ARMS CO.
918 S. Oswego Tulsa, 4, Okla.

AMMUNITION

We can supply War Production Board Allotments to Law Enforcement Agencies, Defense Plants, Special Guards, Farmers and Ranchers. Write today for Application form No. L286.

M & H SPORTING GOODS CO.
512 Market St. Phila., Pa.

BOND
Model "C" Straight Line
LOADING TOOL

•

Double Cavity
Bullet Moulds

•

Send 10c for latest catalog on hand loading

MODERN-BOND CORP.
813 West 5th St. Wilmington 99, Del.

Do We Have Your Correct Address?

Whenever you wish us to change your address, please let us know at least three weeks ahead. Be sure to give your old address as well as the new one. Always include Post Office Zone number, if your city is zoned. Use the coupon to report a change or to renew your membership subscription.

National Rifle Association
Washington (6), D. C.

DEAR N. R. A.:

My Name is ....

New Address ....

City and Zone .... *State* ....

Former Address ....

City - State ....

My subscription expires ....

Extend it for: ☐ 1 year........ $3.00 ☐ Remittance inclosed.

☐ 2 years....... $5.00 ☐ Send bill.

STITH MOUNT

Protects Your Weaver Scope

"INSTALL-IT-YOURSELF"

Easily Installed With Only a Screwdriver.

No Cutting of Wood.

No Drilling of Rifle.

A steel shield over the front end of the scope protects it from accidents, rain and sun: it stiffens the scope tube: eliminates the catch-all nuisance by closing the opening between the end of the scope and the rifle barrel.

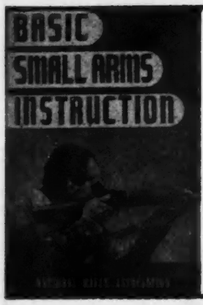
STITH INSTALL-IT-YOURSELF MOUNTS are available for use with Weaver 330-440 and Lyman Alaskan scopes on Winchester M70, Savage M99, and Remington M5 13-S rifles. Also for Weaver 29S scopes on Winchester M75 Sporters and Savage M23 rifles.

PRICE. $12.00

STITH STREAMLINE MOUNTS are made for use with many other combinations of scopes and rifles. Write for information.

A SCOPE IS ONLY AS GOOD AS ITS MOUNT

M. L. & M. J. STITH MILAM BLDG. **San Antonio, Texas**



POPULAR N.R.A. MANUALS

Each 25¢ Postpaid

Basic Small Arms Instruction
The A. B. C. Of Practical Pistol Instruction
The A. B. C. Of Practical Riot Gun Instruction
Practical Home Guard Organization
Practical Organization of Plant Defense
A. B. C. Of Pistol Shooting (Advanced Pistol)
From Tyro to Master (Advanced .22 Rifle)

NATIONAL RIFLE ASSOCIATION
Scott Circle **Washington (6), D. C.**

BOOKS for the DISCRIMINATING SPORTSMAN

The Bullet's Flight—Mann	$6.00
The Modern Gunsmith—Howe	$15.00
Complete Guide to Handloading—Sharpe	$7.50
Modern Gunsmithing—Clyde Baker	$4.50
Handloaders Manual—Naramore	$3.50
Advanced Gunsmithing—Vickery	$4.00
The Officers Guide	$2.50
Firearms Bluing and Browning—Angier	$2.00
Big Game Rifles and Cartridges—Keith	$1.50
The Woodchuck Hunter—Paul Estey	$1.50

Latest Editions, Sent Postpaid for Your Personal Check

THE GOPHER SHOOTERS SUPPLY
FARIBAULT **MINNESOTA**

We Save You Money

Our No. 12 catalog, listing over 500 items. Send 15¢ in stamps for your copy today.

P. J. O'HARE

America's Largest Manufacturer and Importer of Rifle Accessories

552 Irvington Ave. **Maplewood, N. J.**

WANTED—WILL PAY $5.00 FOR NEW HAMmer for S.&W. .22-32 Kit Gun. V. L. Stone, 2933 N.E. 31st Avenue, Portland, Oregon.

WANTED—SINGLE SHOT TARGET PISTOL chambered for .22 L.R. ctg., Remington Rolling Block, S.&W. or Colt. D. A. Wallace, Rutledge, Ga.

WANTED—WINCHESTER PRESENTATION rifles. Prefer engraved models with premium stocks and excellent condition only. M. C. Clark, 169 No. La Peer Drive, Beverley Hills, California.

WANTED—ONE MODEL 99 E.G. SAVAGE rifle, caliber .250-3000, condition very good or better. Reply telegram collect. Keith D. Lott, Lelie, Utah.

WANTED—PRISMATIC SPOTTING SCOPE AND stand. Prefer Bausch & Lomb, N.R.A. or Argus. Must be perfect. Describe and name price in first letter. Also want Winchester 75T or Remington 513T very good or better. M. E. Cameron, 267 E. Arenas Rd., Palm Springs, California.

WANTED—COLT WOODSMAN 4½" V.G. OR better, 200-.30 caliber H.P. or S.P. bullets, pair of Redfield Jr. scope mount rings to fit Weaver 29S. Have base. Tom Lawrence, Nevada City, California.

AUTOMATIC PUMP OR GOOD DOUBLE GUN, any gauge; also .22 rifle or larger, and .22 target revolver, all letters answered. B. Rand, Bryantville, Mass.

WANTED—MODEL 70 .220 SWIFT, OR .22 VARminter 70, or short Mauser action, must be new or perfect with ammunition, also 4X scope and Redfield Jr. mounts for same. W. A. Williams, Box 501, New Iberia, La.

WANTED—COLT DETECTIVE .38 SPECIAL, 2" barrel, excellent condition, with cartridges. Paul Wakefield, Coalgood, Kentucky.

WANTED—SINGLE ACTION COLT .38 OR .357; 4¾" or 5½" barrel. .41 Remington double Derringer. Charles Colbert, 1040½ Victoria Ave., New Kensington, Pa.

WANTED—SAVAGE OR WINCHESTER HORNET rifle with components. Give condition. Ideal powder measure. Ideal sizer and lubricator for Ideal bullet No. 311413, or other calibers. Bullet sizing chamber for No. 10 tool for same bullet. Winchester 115½, 120, 116 Remington 8½, 9½, 6½ primers. Trade—Few Long Rifle cartridges on all the above except rifles. Wayne Overholser, 825½ Caldwell Street, Piqua, Ohio.

WANTED—WINCHESTER 70 STANDARD .270 caliber. Describe fully. George Gollehon, Cody, Wyoming.

WANTED—WINCHESTER M95, CALIBER .30-'06. Rifle preferred. Must be good or better condition. Also 250 rounds ammunition, caliber .300 Savage. H. A. Nottingham, Jr., Debeque, Colorado.

WANTED—1920 SAVAGE COMPLETE ACTION; bullet mould .45 caliber, 350 to 400 grain. Dale Driscoll, 940 Hooven, Hamilton, Ohio.

WANTED—GRIFFIN & HOWE .22 HORNET. Full details. Arthur Leidesdorf, Elberon, New Jersey.

WANTED—SMITH & WESSON 1917, .45 AND ammunition. Condition must be excellent. P.F.C. Irving Benson, 946 Squadron, Gila Bend, Arizona.

WANTED—MODEL 70 WINCHESTER .30-'06 Standard or Super Grade and a Zeiss scope. All letters answered. Lt. C. E. Haines, 86th Nav. Tr. Gp., Hondo, Tex.

WANTED—POCKET-MODEL, .380 COLT AUTOmatic pistol, excellent to perfect with holster and ammunition. Captain H. S. Harding (MC), U. S. Navy, Farragut, Idaho.

WANTED—.22 WOODSMAN HI-STANDARD .22 rifles, hunting rifles, shells, letter answered. Lester Jared, 6359 Delridge Way, Seattle, Washington.

WILL PAY $90.00 FOR A WINCHESTER MODEL 70, .300 H.&H. Bull gun, with or without sights. Inside must be good to excellent, outside and stock only fair. James Whateby, 15517 Stansbury, Detroit, Michigan.

WANTED—D.C.M. SPORTER, M12-16 PIGEON grade, solid rib, .32 Colt Pocket Positive 2½" blue, all excellent or perfect with some shells. Lt. J. P. Manley, Ward 5-B, Lawson General Hospital, Atlanta, Georgia.

WANTED—FOR CASH WINCHESTER OR REMington Enfield as issued. Bore must be excellent to perfect. R. S. Pearson, 2261 Ravenwood Ave., Dayton, Ohio.

WANTED—BROWNING OVER & UNDER SHOTgun. Pigeon or Diana grade. Arthur Ericson, Alcester, South Dakota.

WANTED—WINCHESTER 70, .270 OR .30-'06 caliber with cartridges. Or .256 Newton. .45 Colt, new service, 5½" barrel, very good to excellent, state price and condition. Also 300 Savage cartridges. W. H. Campbell, Campbell Hall, New York.

WANTED—SHARPS BORCHARDT ACTION OR rifle with D. S. triggers. A. D. Paull, Wheeling Stamping Co., Wheeling, W. Va. 11-43

SMITH & WESSON, COLT AUTOMATICS, AND revolvers wanted in good condition. We buy and sell. Send via express prepaid for estimate. Check will follow. Anchor Sport, Box 21, Ithaca, New York.

WANTED—RECEIVER ASSEMBLY, COLT automatic pistol, . Model 1911, or A1. Sgt. Clair Cunningham, Ord. Det., CAAF, Chico, California.

WANTED—I WILL BUY YOUR RIFLES, SHOTguns, handguns, scopes, tools, ammunition, components. Give complete description and price. Robert J. McFeeter, 179 Lincoln Place, Irvington, New Jersey.

WANTED—LATE MODEL COLT FRONTIER Six Shooter, excellent or better, prefer 7½ inch barrel, blue .357 S.&W. Magnum, .38 S.&W. Special, .45 auto. Purpose, duty overseas. Answer all mail if reasonable. No inflation prices. Lt. Elmo Reeves. Box 151, Carolina Beach, N. C.

WANTED—.22, 4½ WOODSMAN. WINCHESTER Model 1911 self-loading 12 gauge. Stevens off-hand .22. C. F. Schrader, Roundswamp Road, Farmingdale, N. Y.

WANTED—WINCHESTER 52, EXCELLENT condition, Standard barrel. M. E. Hammatt, 1328 Scott Street, Covington, Kentucky.

WANTED—S.&W. K-22 OR COLT O.M.T. 22, recessed cylinder. Describe. Pay premium. Ralph Dittmann, 427 Bender Rd., Milwaukee 9, Wisconsin.

WANTED—MODEL 52 WINCHESTER SPORTER, perfect to new, with or without iron sights (no 'scope). Cash or trade any items I have advertised in this issue. O. L. Vosburgh, Underwood, Wash

WANTED—OFFICER'S MODEL .38 SPECIAL, 7½ inch. Give NRA condition, price, etc. Flt. Off. Arthur Moss, 9th Troop Carrier Sqdn., Grenada Army Air Field, Grenada, Miss.

WANTED — COLT BISLEYS, BARREL AND cylinder condition immaterial. 41 grain Sisk bullets. Have a few M .45 ACP once fired commercial cases at $7.00 per M. Or will swap. C. H. Lawson, 89 Myrtle Avenue, Edgewater, N. J.

WANTED—PUMP GUN, 12 GAUGE, 30" FULL; Krag Sporter, ammunition; both good or better. 300 L.R. primers, F.A. .70 or N.M.N.C.; 300 .30 caliber gas checks. Howard Fish, Shelburne Falls, Mass.

WANTED—PERFECT .45 AUTOMATIC, arched housing, accessories, state serial number. Pair cased Derringers. Sword cane. L. W. Dischinger, 5605 Quimby Ave., Cleveland 3, Ohio.

WANTED—COLT CONVERSION UNIT WITH floating chamber to convert .45 to .22 for use by soldier in South Pacific. Will pay top price for unit in good condition. A. J. Hazlett, % Jones & Laughlin Steel Corp., Third and Ross, Pittsburgh, Pa.

WANTED—SAVAGE 12 AUTOMATIC WITH aluminum receiver, lightweight Model 745, 28 inch. Plain Cutts, or Poly, or Browning sweet 16, excellent. State price wanted. S. P. Mosher. Dowagiac, Michigan.

WANTED—COLT AUTOMATIC PISTOLS, .25, .32, .38 or .45 caliber. Warshal's, First & Madison-BB, Seattle 4, Washington.

WANTED—STANDARD WINCHESTER MODEL 12, 16 gauge with solid rib. Good to perfect. Claude Shuff, 620 Franklin St., Johnstown, Pa.

WANTED—TARGET GRADE MODEL 70 Winchester .257 Roberts, excellent to perfect, also ammunition, bullets and primers. Will consider the same in .22 Hornet. Cecil H. Kelly, Rockwood, Tenn.

WANTED—TOP QUALITY, NEARLY PERFECT, English double rifle, caliber .375 H.&H. Lt. Col. Raymond L. Harrison, 298 N. Stanwood Rd., Columbus, Ohio. 11-43

WANTED—SAVAGE M99R. REMINGTON M14 or 141, .35 caliber, Remington 20 gauge Sportsman. Ammunition. Must be very good or better. Bullets for .30-'06. Have 200 Remington No. 8½ primers. The name is not Morganthau, so control yourself! W. S. Vickerman, 503 So. 5th, Kent, Washington.

WANTED—12 GAUGE SHOTGUN SHELLS, SHOT sizes 4, 5, 6. Name make and price. Also want Stevens Offhand .22 pistol. Paul Carter, Bridgeport, Nebraska.

WANTED—EXCELLENT LIGHT SIXTEEN, choked 26" or 28" barrels, full grip, Fox C, X or D grade or Parker DH. Late Model 52 Winchester, Standard or Sporter. Must be sacrifice price. E. A. Olson, 2580 Holmes Road, Ypsilanti, Michigan.

WANTED—OLD TIME .22 CALIBER COLT Single Action pocket revolver or Stevens lightweight tip-up. Marble peep for Winchester 94. Station condition. Alden Goodell, Cohasset, Minn.

WANTED—GOOD TO EXCELLENT .257 OR 70 Winchester, Mauser or 720 Remington with ammunition or components. Art Pulscher, Flandrean, South Dakota.

WANTED—LONG BARREL TARGET REVOLver (Colt's Camp Perry Model or similar). Shot shells of any gauge and .22 caliber ammunition. Ben Tarman, Quincy, Pa.

WANTED—.38 SUPER, WILLING TO PAY NOT more than $50.00. Jesus E. Andrade, P.O. Box 363, El Paso, Texas.

WANTED—FOR CASH—USED GUNS. CASH for your idle shotguns, rifles, pistols, and ammunition. Ship or write for estimate. We buy, sell and trade. Midwest Arms Exchange, 28 N. Hazel St., Danville, Illinois.

TRADE—6X30 ZEPHYR B.&L., LATEST MODEL, new. 8X25 B.&L. Zeiss Stereo, reconditioned. Details on request. Wanted—Latest type Alaskan scope, perfect, post reticule. Wm. F. Neitz, 104 Frisbie St., Vallejo, Calif.

WANTED—S.&W. .357 MAGNUM REVOLVER, new, 5 or 5½" blued, or .357 Colt New Service revolver, new, 5 or 5½", blued, with ring preferred. Must be reasonably priced. J. W. Delong, Whitewood, Va.

WANTED—BY INVALID, FOR STILL HUNTING, some .22 Long Rifle Hollow Points. William A. Sheffer, Machining, Wingdale, N. Y.

WANTED—WESTERN SADDLE AND BRIDLE, pay cash or trade personal collection hand guns and rifles. Frank Ulmer, 2384 16th St., Cuyahoga Falls, Ohio.

WANTED—ONE ENFIELD AS ISSUED. NEW if possible. All letters answered. Member. C. W. Hutchins, 5525 N. E. 28th Ave., Portland 11, Oregon.

WANTED—WALNUT HILL NO. 417½ SPORTER, inside very good or better, outside good or better. Must have some ammunition and be priced reasonably. J. J. Frank, 3975 Christopher, Detroit 11, Michigan.

WANTED—FOR CASH—WINCHESTER 52 Sporter, late Model scope mounted, also fine custom .30-'06, scope mounted. Must be excellent to perfect. M. C. Clark, 169 No. La Peer Drive, Beverly Hills, California.

WANTED—FOR PERSONAL USE IMMEDIdiately, .22 caliber conversion unit for .45 A.C.P. Colt M1911. Lt. George H. Orloff, 1578th Ord. S.&M. Co. Avn. 55th Service Group, Syracuse AAB, N. Y.

WANTED FOR CASH, SHOTGUNS, RIFLES, PIStols, and revolvers. Can use all makes and types. Describe guns fully in first letter, state price, all mail answered. Big Ben Mercantile and Loan Co., 179 Third Street, San Francisco, California. tf

3 SPRINGFIELD .30-40 KRAG BARRELS, NEW or serviceable used. Ed Howe, Coopers Mills, Maine.

WEAVER .330 SCOPE, POST RETICULE, ALSO 25 or 30, Mod. 14A, Remington rifle. Frank Jensen, El Campo, Texas.

WANTED—.30-'06 SPRINGFIELD OR ENFIELD as issued, also Bayonets. Robert Abels, 860 Lexington Avenue, New York.

FOR THE DURATION—

Protect the equipment you have!

Sheepskin Gun Covers M/52 & M/37....	$6.50
Same for rifles with scope atchd........	8.50
Croft full leather case for above.........	8.50
Tanned Sheepskin Scope Cases with Talon on Both Ends to fit: B & L 65mm $5.00; 50mm $3.50; Draw $3.00; Argus	3.75
Same with one Talon to fit: Super Targetspot $4.25; Regular Targetspot & Feeker	3.50

N.R.A. Targets; Cleaning supplies; lots of gadgets.

Free Bargain List showing New & Used items available—with catalog.

BADGER SHOOTERS SUPPLY
Owen, Wisconsin
"SURE WE TRADE"

HI-STANDARD

High Standard experience and equipment are now all out for Victory. Target Pistols will be unavailable to shooters for the duration of the war.

.22 AUTOMATIC

HIGH STANDARD MFG. CORP. 1811 Dixwell Av., New Haven, Ct.

WANTED—THREE, MODEL 52 STANDARD Target, excellent to perfect, for use of State Guard members in Mobile. Also Long Rifle and .38 Special ammunition at reasonable prices. R. E. Hartman, 201 Levert Avenue, Mobile, Ala.

WANTED—.300 SAVAGE CALIBER RIFLES OR ammunition; 8mm. Mauser and .38 S.&W. cartridges; automatic pistol cartridges in following calibers: .25, .32, .380, 9mm., .30 Luger. Spot cash or trade for any other size ammunition or guns. Ship express prepaid or write Klein's, 501E, South Halsted, Chicago. Free Fall "Bargain Catalog", send 25¢ (refunded with first order). tf

WANTED—IN EXCELLENT CONDITION, HIGH grade 20 gauge English or German Over and Under shotgun. Grant Pierce, Bald Mountain, Maine.

AUTOMATIC PISTOLS FOR AN ALLIED NAtion. All calibers except .25. Outside unimportant. Inside good or better. All makes including foreign. Cash paid date received. Quote price wanted in first letter. Greenwald & Haughton, 10301 Berea Road, Cleveland, Ohio.

WANTED—AUTOMATIC PISTOLS .22, .32, AND .45 caliber. Warshal's, First and Madison-BB, Seattle, Washington, 4.

WANTED—FAIR PRICES PAID FOR TARGET pistols, revolvers, rifles and antique guns of all kinds. Ship for estimate, Public Sport Shops, Dept. R-65, 13 S. 16th St., Philadelphia, Pa.

WANTED—BINOCULARS, HAND-GUNS, rifles, shotguns, scope sights, Mauser '98 actions, components, reasonable. C. E. Purdie, Faribault, Minn. tf

WANTED FOR CASH, KENTUCKY FLINTLOCK and percussion rifles, also military long arms. Robert Abels, 860 Lexington Ave., New York, 21.

WANTED—CUSTOM-BUILT .257 WITH OR without scope. Lloyd Raab, Vashon, Wash. 12-43

WANTED—.45 AUTO. COLT FRAMES OR COMplete guns in poor condition; also primers for .30-'06. E. S. Burrell, 717 Wyndmoor Ave., Philadelphia 18, Pa.

WANTED—AUTOMATIC PISTOLS FOR WAR. American, Spanish, German, calibers .32-.380-.38-.45 and Lugers. Thousands needed. Outside unimportant. Inside good or better. Quote price wanted in first letter. Greenwald & Haughton, 10301 Berea Road, Cleveland, Ohio.

M-54 & M-70 WINCHESTER. CONDITION NOT material, or action. A. Shivell, 4323 Sunset Blvd., Los Angeles, California.

WANTED—COLT AND S.&W. REVOLVERS, automatic pistols, .30-'06 cartridges, .45-70 cartridges, Springfield rifles, Enfield rifles, Krag rifles, cameras any make. Warshal's, First and Madison-BB, Seattle 4, Washington.

WANTED—MODEL 39A MARLIN, PEEP REAR preferred. State lowest price. Maxey E. Stone, Blackstone, Virginia.

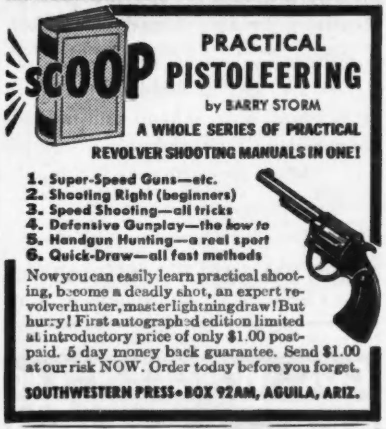
WANTED—MUZZLE LOADING TARGET rifles. Also Ballard, Stevens or Winchester Scheutzen rifle. T. J. Cooper, R-7, Meadville, Pa. 2-44

WANTED—.38 SUPER AUTOMATIC, VERY good. Reasonable. C.O.D. examination. William Sexton, 338 East 53rd, New York City.

Dedicating ourselves to supplying their tools in a continuous uninterrupted flow is the essence of effective teamwork.

*Send for free booklet on **Sedgley Rifles** in which the reader meets Sir Lancelot—the Mascot Knight.*

R. F. Sedgley, Inc.
PHILADELPHIA, PA.
ESTABLISHED 1897



SCOOP

PRACTICAL PISTOLEERING

by BARRY STORM

A WHOLE SERIES OF PRACTICAL REVOLVER SHOOTING MANUALS IN ONE!

1. Super-Speed Guns—etc.
2. Shooting Right (beginners)
3. Speed Shooting—all tricks
4. Defensive Gunplay—the *how to*
5. Handgun Hunting—a real sport
6. Quick-Draw—all fast methods

Now you can easily learn practical shooting, become a deadly shot, an expert revolver hunter, master lightning draw! But hurry! First autographed edition limited at introductory price of only $1.00 postpaid. 5 day money back guarantee. Send $1.00 at our risk NOW. Order today before you forget.

SOUTHWESTERN PRESS • BOX 92AM, AGUILA, ARIZ.

Official Gauge

NEW OFFICIAL GAUGE

A Precision Scoring Gauge
For .22-.32-.38-.45 Cal.
Cased as Shown $1.75

NATIONAL RIFLE ASSOCIATION
Scott Circle Washington 6, D. C.

Specials on Cartridges

Price per box
219 Zipper.................. $1.34
.25 Rem. 1.40
.40-65 .... $1.56 .303 Savage..... $1.45
.405 Win......... 2.32 .44 S & W Spl... 2.27
.300 Magnum ... 2.55 .44 Win. Shot.... 1.81
30-06 Blanks 2.08

CLOTHING SPECIALS *(Prepaid)*

ARCTIC ALL FUR CAPS With ear flaps.................... 9.95
MUSKRAT CAPS Ear flaps, full wool crown............ 5.95
SHEEPSKIN VESTS Heavyweight—1 pocket with buttons.. 5.75
Heavyweight—1 pocket with Zipper......... 6.75
SHEEPSKIN COATS Full Collar, Hip Length, Water repellant 17.45
BLUE MELTON JACKETS All wool, two slash Pockets, Zip Front 5.25
ELASTIC GLASS RAIN JACKETS Seconds, Transparent, Zip Front..... 4.25
ARMY REJECT RAINCOATS Slight Imperfections, Guaranteed.... 7.25
SERVICE MEN'S NECKTIES Colors: Navy, Tan, Brown........... .65
NEW ARMY REJECT JACKETS.......... 2.49

NEW ARMY REJECT REGULATION .45 AUTO HOLSTER 2.45
USED ARMY REGULATION .45 AUTO HOLSTER .... .89
NEW GOVERNMENT STYLE SLINGS, 1¼", at $1.25; Swivels 1¼", 35¢ set.
FREE: Illustrated Ski Equipment, Archery, and Sporting Goods catalog, Medal-Award 10¢

J. WARSHAL & SONS
First-Madison-B Seattle 4, Wash.

Spotting Scopes and Stands

Mossberg Model A—Spotshot $22.30
Mossberg Folding Stand . . . 7.65

20 Power single draw tube scopes and stands are still available for sale to clubs, small arms schools and individual members for training and instruction. Better order now as the supply is limited.

(Sent Postpaid to any of the above.)

NATIONAL RIFLE ASSOCIATION
Scott Circle Washington 6, D. C.

COL. WHELEN'S BIG GUN HANDBOOK & CATALOG

$1 POSTPAID
REFUNDED ON YOUR 1st PURCHASE OF $5 OR MORE

176 pages fully illustrated. Articles by leading experts on all phases of rifle, shotgun and hand gun shooting. Ballistic tables, angles of elevation, small bore records, world's record fish and a wealth of interesting data.

PARKER-WHELEN Co., INC. R 30 827 14TH ST., N. W. WASHINGTON, D. C.

ONE ALL WEATHER LYMAN ALASKAN SCOPE, prefer cross hairs. One case or less 20 gauge heavy loads about No. 6 shot. Write details. Frank H. Robertson, 1502 Broadway, Houston 12, Texas.

WANTED—LONG KRAG, MUST HAVE EXCELlent bore and action. Ideal tool and moulds for .45-70, .30-40. Ideal moulds No. 575213, 30812. Don Stanton, Sherman, N. Y.

WANTED—COLT .44-.45 FRONTIER (PEACEmaker) converted to .22 L.R., VG to ex. condition. Price reasonably. Describe fully. Charles Slatkavitz, Millers Falls, Mass.

WANTED—12 GAUGE PUMP GUN, S. & W., .357 Magnum & Colt M.T. Give full details and price. Victor E. Recane, 424 N. Lockwood Ave., Chicago, Ill.

WANTED—NEW, PERFECT WINCHESTER Model 12, 20 gauge. 20 gauge, high velocity shells, Dick Clifford, 337 West Vernon Avenue, Phoenix, Arizona.

WANTED—330 WEAVER SCOPE. .257 POTTER Gem dies. No. 40, 10X shooting coat. Reichenback's Automatic Pistol Marksmanship. Crossman's Book of Springfield, Freeland 2 buckle cuff. Sheepskin case for scoped Mauser. Leon W. Lowell, 2316 Beech St., Alexandria, La.

WANTED—.38 S. & W. HAMMERLESS OR .38 Special. Make best cash price. C. M. Pickel, Jr., Harriman, Tenn.

MODEL 70, .270, .300 H. & H., EXCELLENT OR better. Describe first letter. Pacific dies above calibers, also .32-20. R. L. Eager, Box 411, Rainier, Oregon.

WANTED—ITHICA 10 GAUGE MAGNUM IN good condition or better. H. L. Henry, Rt. 1, Palacios, Texas.

WANTED—GOOD REASONABLE .410 SHOTgun, .45 automatic, 8mm. Soft Point Mauser cartridges. Capt. Buck Brown, Rt. 1, Largo, Florida.

WANTED—MODEL 70, ANY CALIBER OR CONdition. Wanted—For action only. Sam Bond, New Philadelphia, Ohio.

WANTED—GOOD OR BETTER S.&W., M.&P., 2 inch, round grip or S.&W. Terrier; little ammunition for each. Also, S.&W. .357 ammunition. R. Stamper, RM2C, U.S.N.R., % Mrs. Stamper, 1814 C Street, N. E., Washington, 2, D. C.

WANTED—MATCH TARGET WOODSMAN, Officer's Model 22. Must be reasonable. Joseph Bickar, Zone 5, Canton, Ohio.

WANTED—52 SPORTER, HI-STANDARD E, 4½". Describe fully. Lt. Wendell D. Kalen, 1807 Brozos, Austin, Texas.

WANTED—WINCHESTER 52 SPORTING RIFLE with side safety and ammunition. Excellent condition. Write description and price. J. A. Thacker, Box 363, El Paso, Texas.

WANTED—.45 COLT AUTOMATIC, .22 OR .38 Officer's Model, .357 S.&W. Magnum, Mannlicher Schoenauer rifle or action, .38 Pacific tool, 75 Winchester, .32-20 barrel for S.&W. revolver. State price and condition. Stanley Babiarz, General Delivery, San Miguel, California.

WANTED—CROSSMAN PELLET RIFLE, EXCELlent to perfect. H. L. Stevens, 4176 W. Washington, Los Angeles, California.

WANTED—REDFIELD JR. SCOPE MOUNT FOR Model 70 Winchester. Max Fowler, Frankfort, Indiana.

WANTED—26" SKEET BBLS. FOR BROWNING O.&U. Standard grade, vent. rib preferred. Edward Lang, Naval Gunnery, Purcell, Oklahoma.

AMMUNITION

TRADE—14 BOXES 12 GAUGE SHELLS FOR 20 gauge 6 or 8 shot. Roy Herthel, Salem, Indiana.

SWAP—ONE SCARCE RADIO TUBE FOR 250 Long rifles prepaid. 1400 No. 116 primers, for 1000 smokeless Match .22's. Write. J. S. Floam, 3 South Frederick St., Baltimore 2, Maryland.

300, '06, .37-38 ISSUE, 172 GRAIN. BOATTAIL, $7.50 hundred. J. W. O'Hara, Winterset, Iowa.

WILL TRADE AMMUNITION .30-30, .220 AND other for Hornet and 25-20 dies (Pacific). Also trade ammunition for rifle actions, Sharps Borc., Mauser or others. Frank Foster, Clovis, New Mexico.

TRADE—STARRETT 6" VERNIER CALIPER. No. 122 in case. 20 Western .30 M2 cartridges. 40 Savage .303 Savage cartridges. All perfect. Wanted—.300 Savage and .32 Colt automatic cartridges. Or what have you. Joseph Buckley, 3461 Vasper Street, Philadelphia 34, Pa.

BIG PRICE LIST NO. 405 OF 1000 ITEMS OF interest to Cartridge Collectors, 20¢. List of rifle and revolver ammunition for the Shooter, 20¢. List of empty paper shells, wads and primers for the shell reloader, 10¢. Jap Hunting License, 10¢, 3 for 25¢. Which do you want? Wanted—H.&R. heavy breech, 10 gauge, 36 inch single, must be fine condition. Chas. Shattuck, Cherry Creek, New York.

HAVE 1000 WARDS, .22 SHORTS, LONG RANGE lead lubricated. Trade for 1500 large NMC rifle primers. Bill Sweet, Coldwater, Michigan.

WILL PURCHASE OR TRADE SHELLS FOR .410, 3 inch shells in 7½ or 9 shot. Carl Vickers, Fayetteville, W. Va.

WANTED—.22 CALIBER LONG RIFLE AMMUnition. Will pay $10.00 per thousand. Greenport Rifle Club, Greenport, New York.

TRADE ONLY—200 FRESH 7.63MM. MAUSER auto. pistol. 77—9mm. Mauser, 280-grain soft-nose cartridges. Wanted—.22 L.R., Super .38 auto. cartridges. Trade based on equal prewar value. M. Mandel, 53 South King, Hampton, Virginia.

SWAP—60 ROUNDS FRESH REMINGTON 110 grain .30-'06 for 150 or 180 grain .30-'06, 130 rounds clean 37 to 42 M2 for 60 rounds 150 or 180 grain, .30-'06 Commercial expanding. W. W. Kothmann, Route #1, Brady, Texas.

75 KINDS SPORTING AMMUNITION, SALE OR exchange. Drop card or letter stating caliber and quantity desired and receive free list. Joseph L. Blalock, Moscow, Idaho, R. 2.

.30-'06 AMMUNITION FOR SALE. ALL C.O.D. at $4.95 per hundred. Peter Courlas, 143 H. L. Dr., Johnson City, New York.

M1 AMMUNITION, 300 ROUNDS, $30.00. BULlets 150 gr. (1918) 525, $12.50. American Rifleman, 142 issues, $10.00. F. A. No. 70 primers 750, $5.00. First money orders. J. H. Kelley, Jr., 333 E. McDaniel, Springfield, Missouri.

ARMY OFFICER DESIRES FOR PERSONAL USE several boxes 7mm. commercial cartridges, 150 grain preferably, or 139 grain. Major A. A. Sanna, Jayhawk Ordnance Works, Pittsburg, Kansas.

FOR SALE—AMERICAN RIFLEMAN BOUND copies from 1926 to 1938, unbound to 1943. Cartridge collection over 400 different types, some rare. Stamp for list. Riley Diener, 1723 Oakland Ave., Elkhart, Indiana.

TRADE—12 GAUGE SKEET 9'S FOR 7½'S OR similar loads. Also have various 16's. Henry Shaw, 76 Westland Road, Weston, 93, Mass.

TRADE—AMMUNITION—.35 REMINGTON, .270 Winchester, .22 Long Rifle 12 and 16 gauge shotgun shells. All ammunition is fresh and clean in original factory boxes. Wanted—.22 Hornet and .220 Swift. Winchester ammunition preferred. J. Harding Anders, R.D. No. 2, Norristown, Pa.

CASE 12 GAUGE KLEANBORE NITRO-EXpress No. 4C, $60.00. M.O. only. Wanted—.22 Shorts. J. G. Griffith, 4600 Kensington, Tampa, Florida.

AMMUNITION WANTED SMALL OR LARGE quantities, .30-30; .32 Special; .35 Remington; .30-'06; .300; .22's, send description and best cash price. The Jaymac Co., Jackson, Michigan. tf

WANTED TO BUY—AMMUNITION, ALL TYPES wanted. State condition, age and caliber. High prices paid. Make offer. Stoeger Arms Corporation, 507 Fifth Avenue, New York, N. Y.

WILL TRADE CARTRIDGES FOR HANDGUNS, obsolete, poor, or broken. Have .22 R.F., .25-35, Krag, .32, .38, powder & ball .44, .36, and other sizes. While they last. J. M. Dockstader, 453 School St., Woodbridge, N. J.

WANTED—.30 LUGER AMMUNITION. WILL pay good price for 1000 rounds or less. Lt. Commander J. W. Johnson, Naval Air Station, Seattle, Washington.

.270, .30, KRAG-7.65 AND 9MM. LUGER, .380 Colt, .44-40, $4.50 box. 7mm., .250 Savage, .30 Remington, $4.00 box. .22 Hi-Power $3.00. Also .32 Savage automatic pistol, 100 shells, $35.00. .25 Colt automatic, 3 magazines, 100 shells, $35.00. Marlin .30-30 carbine, 20 shells, case, $50.00. .30 caliber Standard gas operated, Automatic rifle, 74 shells, $60.00. All good condition. U. W. Symons, 414 7th St. W., Ashland, Wisconsin.

WANTED—MODERN AND OBSOLETE CARtridges all sizes. Send list for quotation. Ed Howe, Coopers Mills, Maine.

TRADE ONLY—12 GAUGE, 7½'S, 8'S and 9'S. All new stock, Remington and Winchester (approx. 2000 rounds), 500 of .220 Swift Remington 48 grain S.P., 300 of .257 Roberts 87 and 117 grain, also 100 of Western Silver Tip .257 Roberts 100 grain, 500 .30-'06 Western 180 grain O.P.E., approx. 500 of .38 S. & W. Special. Want—.257 Western 100 grain O.P.E., .257 Winchester 100 grain pointed expanding, 7mm. Western and Winchester 175 grain S.P., .270 W.C.F. Winchester or Western 150 grain S.P., 8mm., all makes 236 grain S.P., .44 W.C.F. Winchester and Western, 200 grain regular and 200 grain high velocity, .22 Hornet, Western and Winchester. All of my cartridges are new and clean in original boxes. I expect the same from you. Equal pre-war dollar value is my basis for trading. I am not a dealer and have no cartridges, etc., for sale. Philip G. Rust, Granogue, Delaware.

1150-.32 WINCHESTER RIM-FIRE BLANK Shorts. 120-.22 Savage H.P. 70 grain Kleanbore. 100-H.V. Peters ,348 cartridges. 240-.45-90 Peters 300 grain Soft Point Rustless. .350-.25-35 new unprimed cases. Trade—Any or all for non-rust .22 Long Rifle cartridges. Frank H. Robertson, 1502 Broadway, Houston 12, Texas.

TRADE—3 BOXES .30-40 PETERS HI-VELOCITY 225 grain expanding and one box same not Hi-Velocity for 4 boxes .30-'06 Silver Tip or similar. Maxey E. Stone, Blackstone, Virginia.

REMINGTON CARTRIDGES, .32 S.L. SOFT Point, $6.50 per hundred. .32 Remington Soft Point Kleanbore rifle cartridges, $8.75 per hundred. .35 S.L. Cartridges, $6.50 per 100. .38 Rim Fire Winchester revolver cartridges, $2.00 per hundred. .300 H.&H. Magnum cartridges, $15.00 per 100. .375 H.&H. Magnum, $15.00 per 100. .405 Winchester Staynless, $15.00 per 100. 7.65 Mauser rifle cartridges, Peters Rustless, $10.00 per 100. .45 automatic pistol cartridges, $6.00 per 100. .35 caliber Smith & Wesson automatic pistol cartridges, $3.50 per 100. .44 Henry flat lead cartridges, $4.00 per hundred. .45-90 Winchester Smokeless lead cartridges, $10.00 per 100. Public Sport Shops, Dept. R-65, 13 S. 16th St., Philadelphia, Pa.

CARTRIDGES FOR COLLECTORS, SINGLE specimen, some boxed lots. List. Stamp. Ed Howe, Coopers Mills, Maine.

TRADE—.22 LONG RIFLE "KLEANBORE" CARtridges for .22 Shorts or fresh Match L.R.'s, Palma, Police, and Super Match, etc., for regular L.R.'s on pre-war retail basis for quantity. Trade any amount. Will buy Shorts, pay highest prices. Sportsmen's Headquarters, Palm Springs, Calif.

TRADE—.22 L. R. XPERT REGULAR OR .22 L. R. Super Match Target or .38 Midrange Western for perfect Zeiss binoculars 6 x 30 or 7 x 50 with Central Focusing. Ammunition perfect. Want—Pacific Dies and shell holder for .32 S. & W. Long. F. G. McDonald, 713 Lombard, Evansville 14, Indiana.

TRADE—SHELLS, 24 BOXES 16 GAUGE FOR case 12 gauge. Geo. M. Marshall, Natchez, Mississippi.

22 BOXES .22 SAVAGE HI-POWER, $2.00. 12 boxes .220 Swift, $2.25. 40 boxes .25-20 Winchester, $2.95. 3 boxes .25-20 WHV, $3.00. 5 boxes .32 Winchester SLR, $3.95. 20 boxes .38 Long Colt, $2.45. 8 boxes .38 Auto, $3.25. 16 boxes .44 S. & W. Special, 2 American, 3 Russian, $3.45. 10 boxes 44XL shot, $3.00. 25 boxes 9mm. shot, $1.95. English Studio, Jefferson City, Mo.

.30-'06 AMMUNITION NM, 7½¢, REGULAR 6½¢ each. .38 Special, $1.20 box. Trade 220's for .30-30, .257's. Schmitt Armory Reloader, 3 set dies, $72.00. Want—Percussion rifles, shotgun. C. Engelbrecht, 516 S. Orchard, Madison, Wisc.

WANTED FOR CASH—AMMUNITION, ANY quantity, all calibers. Write Public Sport Shops, Dept. R-65, 13 S. 16th St., Philadelphia, Pa.

SEND 3¢ STAMP FOR LATEST LIST MODERN and Obsolete Cartridges. Kimball Arms Company, Woburn, Mass. tf

RELOADING SUPPLIES AND HAND LOADS

DUPONT 4227, 4320, 4064, 4350, $1.60 PER pound. 4759 & No. 6, $1.00 per 8 oz. Badger Shooters Supply, Owen, Wisconsin.

WANTED—25 CALIBER JACKETED BULLETS and large rifle N.M. primers. Henry Thompson, Life Member, Pleasant Lake, North Dakota.

WANTED—.30-30, .32 SPECIAL, .300 SAVAGE, KRAG, .35 Remington cases and bullets, at fair prices so others can hunt. Custom reloading. Federal Licensed Manufacturer. F. Enerson, Auburn, Mass.

WANTED—IDEAL MOLD OR BLOCKS FOR bullet No. 319289. Caliber .32-40. Walter Van Curen, Estacada, Oregon.

WANTED—UP TO 500 ROUNDS .218 BEE AMmunition. Any make. Reasonable. Lt. Col. R. L. Kapsa, H.N.S.C., Fort Douglas, Utah.

WANTED—116, 6½, 1½, N.C.N.M. PRIMERS. Have purchasers permit. George Mitchell, 5207 So. Jay Street, Tacoma, Washington.

WANTED—CALIBER .270 BULLETS. WILL buy at your price or trade you .220 or .30-'06 bullets. Roy Weatherby, 7672 California, Huntington Park, California.

WANTED—55 TO 63 GRAIN SISK OR WM8S, .224 components for Winchester Swift, will take your entire lot. Chester C. Williams, 521 Case Street, Rochester, Pa.

WILL PAY GOOD PRICE FOR 1000 SISK 55 grain Express, .224 bullets. George Semonsen, 591 Mission Street, San Francisco, California.

WANTED—NEW 12 GAUGE EMPTY & LOADED shotgun shells. Also good revolvers and automatics. W. M. Perry, Columbia, S. C.

SALE—.270 AMMUNITION, HANDLOADED with 138-grain lead bullets, in necked down .30-'06 cases, $2.50 per box. Trade: .270 primed cases for .270 jacketed bullets. Theodore Davis, 6018 Sheridan St., Riverdale, Maryland.

WANTED—.30-03, .32 WINCHESTER SPECIAL, .348, .30-40 and .300 Savage cases and bullets. Primers, large rifle, shotgun, for smokeless powder. Primed cases, rifle or shotgun. Will trade sporting goods or loaded ammunition for components. State what you have and what you want. Jim Clark, 2029 W. Fondulac, Milwaukee, Wisconsin.

SHOOTERS I AM ALL CAUGHT UP WITH orders and still loading almost all calibers. Prices are still fair, but am using mostly cast bullets, 10% discount when you send your own primers, am badly in need of primers, cases & bullets, will pay a fair price for them so it will enable me to keep up my low prices on reloads. Want Multi cavity bullet moulds in good shape, B.&M. Powder measure, Star sizer and lubricator, extra dies for same and Potter Model B Melting pot. Please send your own cases when requesting reloading as I have very few to loan. Also state if they are for reloading or for sale. Will pay $10.00 a thousand for N.M.N.C. primers, just send them in sealed boxes and I will mail check. All letters answered. Yours for better shooting. Art Binder, 1915 Brewster St., Redwood City, Calif.

WANTED—BULLETS, 100 OF EACH—115 GR. S.P. .32-20, 180 gr. S.P. .30-'06, 250 gr. Silver Tip .348, also 2 boxes cartridges .348-.250 gr., 1000 large rifle primers. 1 Ideal sizer and lubricator. C. H. Rothermel, Alburtis, Pa.

WANTED—.22 HORNET AND .220 SWIFT shells. Factory or handloaded. Price no object. Send C.O.D. Want Hornet primers and bullets. Ward G. Hayter, 1012 Irwin Street, San Rafael, California.

IPCO COLLOIDAL GREASE WADS (RIBBON form) are an investment in better groups; furnish a gas seal, retarding erosion. IPCO Colloidal Bullet Lubricant insures barrel protection, retarding or eliminating fouling. New barrels are limited for the duration. Extend barrel life with IPCO products. Boxes, $1.00 each, delivered. Industrial Products, 102 Pearl, Boston 10, Mass.

RELOADING—.38 SP., .44 SP. & .45 COLT. Wanted—Hornet bullets. Fred C. Smith, Middlebury, Vermont.

WANTED—IDEAL LUBRICATOR AND SIZER. Must be mechanically perfect. State cash price or will trade 500 Palma Match L.R. Joseph Maule, 3084 North 18th Street, Kansas City 2, Kansas.

CUSTOM AMMUNITION, SERVICE—FEDERAL Licensed—.38 Special, .30-'06, Krag, .32 Special, .300 Savage, .30-30, others. Send cases. Cases, bullets, primers wanted for above. Prices from $2.00 to $4.00 per box. List guns, etc. Stamp. Sell excellent B.&L. prismatic scope, 19X, NRA, Mossberg Stand, $100.00. F. Emerson, Auburn Street, Auburn, Mass.

STILL PLENTY OF THE FOLLOWING IN stock:—New primed shells (not loaded cartridges). Peters Rustless, fresh stock. 8mm. Mauser, $8.00 per hundred. .44-40, .32-20, and .25-20 Repeater (not .25-20 S.S.), $3.75 per hundred, $33.50 per thousand. No. C.O.D.'s please. Robert Haelig, Boundbrook, N. J.

STILL PLENTY OF THE FOLLOWING IN stock:—Bullets only (not loaded cartridges), fresh stock, Peters and Remington. .38 Special, 158 grain metal jacket, Lead Bearing, $2.50 per hundred, $20.00 per thousand. 8mm. Mauser, 236 grain Soft Point, per 300, $10.00; per 1500, $45.00. 7mm. Mauser, 175 grain Soft Point, per 300, $9.00; per 1500, $40.00. .32-20, 80 grain Hollow Point, per 500, $13.75. .25-35 (.256" diameter), 117 grain Express Mushroom (Hollow Point), per 500, $17.50. No C.O.D.'s please. Robert Haelig, Boundbrook, N. J.

DUPONT 3031, 4198, 4227, 4320, 4064, 4350, in 1-lb. cans, $1.60. HiVel No. 2, 2400, Lightning, $1.60 lb., repacked into your cans. No. 4759, No. 6, Bullseye, Unique, MX and bulk shotgun smokeless, $1.00 per ½-lb., repacked into your own cans. Send empty cans parcel post prepaid and copy of federal purchasers explosives license. Chilled shot, sizes 2, 4, 5, 6 and 7½, $1.00 per 5-lb. bag. Leslie Lindahl, Central City, Nebraska.

400 NEW 10 GAUGE WINCHESTER HIGH BRASS base primed cases, 400 primers, 2M wads, 1M cards, $50.00. 1M, 16 gauge new primed cases, $50.00. 7M, 12 gauge wads, 2M cards, $50.00. 2M, 16 gauge wads, 1M cards, $20.00. 50 new Winchester 12 or 16 gauge brass primed cases, 200 primers, $15.00. 100 new 16 gauge primed cases, 100 primers, handloading tool, $15.00. Sold in units only. M.O. Please. J. Hendrick, 33416 Vine St., Willoughby, Ohio.

WANTED—.25 CALIBER BULLETS 70 & 87 grain. Also M70 action. L. Weatherbee, 78 Lake Place, New Haven, Conn.

Save Your Rifleman

Buy one of these quality binders of heavy crush grain fabrikoid, richly embossed with bronzed title panels to keep your magazine fresh and convenient for reference. It's a handsome addition to any library. Holds a full year of THE RIFLEMAN and costs only $2.25, postpaid.

NATIONAL RIFLE ASSOCIATION
Scott Circle—Washington 6, D. C.

THE BIGGEST $1 VALUE In The Gun World

19,218 Items
8,926 Pictures

"THE SHOOTERS BIBLE"

The Latest information on Arms & Accessories

NEW from Cover to Cover!

"The Shooter's Bible"
1944 EDITION
STOEGER
STOEGER ARMS CORPORATION

No. 35

512 Pages
NEW:
MANY IN FULL NATURAL COLORS!

The recognized dependable guide for the Sportsman and Shooter. New revised edition gives you current prices on all models and tells you what is available.

New articles by prominent authors and manufacturers. A full line of Accessories, Targets, Holsters, Sights, Clothing, Gun Parts, etc., etc.

Greatly Enlarged Book & Parts Section. More for your money than ever.

A MUST FOR EVERY SHOOTER!

Don't delay. Send a DOLLAR BILL, check, M.O. or stamps for your copy of "The Shooters' Bible" TODAY.

Mail $1 NOW!

USED GUNS Bought and Traded

STOEGER ARMS CORP.
507 5th Ave., New York, N.Y.

I enclose a DOLLAR BILL, check, money order, coin or stamps for your NEW 512-page Catalog No. 35.

Name ....

Address ....

City & State ....

A-10

America's Great Gun House

★ DUXBAK ★

Rifle Shooting Coat

Your good-looking, comfortable shooting coat, styled by DUXBAK for long wear, will continue to give you good service if you take care of it.

But possibly you are wearing a G. I. shooting coat this year and are looking forward to having a new model for peacetime target practice.

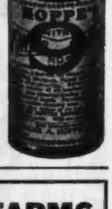
When you are ready for that, we hope to have your favorite DUXBAK coat at your nearest dealer.

UTICA Duxbak CORP.
TRADE MARK
830 Noyes Street
Utica, New York

GET GUN DIRT OUT with HOPPE'S No. 9

Don't let primer salt, powder residue, metal fouling and/or rust take away your gun's accuracy, power and life. Clean and protect that gun with Hoppe's No. 9—the sure, quick, "work-while-you-wait" gun cleaner and protector. At your dealers or PX store, or send 10c for sample. Valuable "Guide to Gun Cleaning" FREE for the asking.

FRANK A. HOPPE, INC.
2321 N. 8th St., Philadelphia 33, Pa.



CASH FOR FIREARMS

We buy, sell and exchange all types of good used firearms, photographic equipment and binoculars. Just ship us what you have. We'll quote our best offer by return mail. If not satisfield we'll return merchandise.

M & H SPORTING GOODS CO.
Established 1872
512 Market St. Philadelphia, Pa.

FOR SALE: THIS SPACE—AT LOW COST

A display ad of this size measures 14 agate lines or one inch. It costs $14.70 per issue if less than six insertions are used within one year; $13.30 per issue for six or more insertions in a year; only $11.90 per month for twelve consecutive insertions. THE AMERICAN RIFLEMAN circulation is now well over 65,000 copies monthly. We will be glad to help you in writing "copy," making "lay-outs," etc. No charge, of course. What is your product?

USED GUNS BOUGHT SOLD-TRADED
State make, model, caliber and condition of guns offered or wanted.
"The Shooter's Bible", 512 pages—$1.00
STOEGER ARMS CORP. 507 Fifth Ave., N.Y.

WANTED—NEW OR FIRED ONCE EMPTY cases in .219 Zipper, .22 Savage HP, .220 Swift, .25-35, .25 Remington and .257 Roberts. Stevens 44½, Winchester Hi-Side, Sharps Borchardt, Winchester 70's, Springfields, actions or complete rifles. Leslie Lindahl, Central City, Nebraska.

DUPONT, 4350, 4320, 4064, 4227, $1.60 PER pound. No. 6 pistol, ½ lb. $1.00. Hercules, 2400, Lightning, Hivel No. 2, $1.55 pound. Unique and Bullseye, 14 oz., $1.60. Red Dot shotgun pound, $1.85. Shot and wads. Arthur E. Anderson, Fullerton, North Dakota.

TRADE—NEW IDEAL LUBRICATOR, $12.00. Wanted—Excellent H.&R. Sportsman. .22 Express bullets, 50, 55 grain. T. R. Conrad, Indiana, Pa.

BULLET MOLDS SUPPLIED ONLY TO ESSENTIAL users at this time. Hensley & Gibbs, 2692 E. Street, San Diego, 2, California. tf

1942 PRICES ON SURPLUS AMMUNITION ACquired for personal use. Calibers .25 to .50. Black and smokeless. Pistol and rifle. No list. State wants. Calvin Goddard, 3533 Quebec, Washington, D. C.

WILL RELOAD YOUR .30-30, .30-40, .30-'06, .300 cases for 10¢ apiece, Hornets Cases, 9¢. Arthur Hanson, 2715 Wood, Kansas City, Kansas.

WILL PAY $2.00 PER 100 FOR GOOD .30-'40 cases, $10.00 per 1000 for N.M.N.C. large or small rifle Primers. Arthur Hansen, 2715 Wood St., Kansas City, Kansas.

F.A. BULLETS: M1 5¢; M2 4¢; .45 A.C.P. $25.00 M; F.A. cases: M1 .30-'06 fired once, resized and primed 295, $8.00; 2000 empties $12.00; Commercial .38-40, .45, new $5.00 hundred, A.C.P. fired once $10.00 M; primers F.A. No. 70, .45 A.C.P., $10.00; Pacific dies, shell holders, bullet sizers, moulds .38-40, .38 Special, $17.50 each set; Springfield National Match barrel, in the original factory grease, $35.00; Woodsman, perfect, $65.00; 1917 Colt, perfect $50.00; Colt .32-20 S.A. cylinder good, barrel damaged, hammer, spring, sleeve, rod, bolt, $15.00 lot; Woodsman sear, hammer $6.00; Remington 37 trigger assembly, not Sweeney $12.50; Taft Peirce surface plate $60.00, Universal square $50.00, V blocks $25.00 pair; Johannson straight edges $50.00; all perfect. Leitz Stereo Microscope, excellent, $150,00; Rex engraving block, good, $90.00; Hartmann rifle trunk $10.00. Thomas Mazas, 15 West South Temple, Salt Lake City, Utah.

GUNSMITHING

OREGON MYRTLEWOOD GUNSTOCK BLANKS. "The Most Beautiful Wood That Grows." Prices $3.00 to $10.00. Catalogue upon request. Beaumont's, The House of Myrtlewood, Marshfield, Oregon. 9-44

.99 SAVAGE CHANGED TO .300. MAUSER '98 changed to .30-'06. Enfield to cock on opening. Stocks, blueing, unobtainable parts made. Custom rifles. Bayers Gun Shop, Walla Walla, Washington. tf

KILBOURN HORNET, DEADLY ON CHUCKS and crows. 3,000 F.P.S. velocity with .45 grain bullets, 2,900 F.P.S. with 50 grain. Your Hornet rechambered $5.00. Magazines altered for long bullets, Winchester, Savage, $2.00. Lysle D. Kilbourn, New Hartford, N. Y. tf

CHRISTY GUN WORKS, 874 57TH ST., SACRAmento, California. tf

CHECKERING TOOLS, HANDMADE BY checkering expert. Set of three Checker, Border and Cleaner; also directions, complete, $2.75 postpaid. Warner's, 354 Hamilton Avenue, Norwich, Conn. tf

RIFLE AND GUNSTOCK BLANKS IN FOLLOWing woods: American Walnut cut from crotch and stump figure. Circassian Walnut. Extra fancy Oregon Myrtle, beatutiful figure and Bird's Eye Maple. Wholesaler, with sawmill supervision insuring right grain in grip. Cheapest prices obtainable. Special inletting service to gunsmiths. D. W. Thomas, P. O. Box 184, Vineland, N. J.

WANTED—USED .22 BARRELS EXCELLENT condition; 2R Lovell or .25-20 single shot cases; Farquharson, Borchardt or Martini actions. Joe Scott Kirton, Box 231, Orlando, Florida.

ARTISTIC ENGRAVINGS ON FINE GUNS; game scenes in relief; gold inlay, scroll work, etc. Folder on request. A. Griebel, 4724 N. Keystone Ave., Chicago, Illinois. 7-44

FIGURED WALNUT RIFLE BLANKS FROM $3.50. Specials from $10.00. Every blank guaranteed, delivered free. Horn tips 50¢. Mitchell Bosly & Co. Ltd., Little Shadwell Street, Birmingham, England. 7-46

SELL—FEW 1898 MAUSER 8MM. BARRELS. Good condition. No sights, $5.00. Floyd Butler, Poultney, Vermont.

ORTGIE FIRING PINS, $1.25. SPRINGS 35¢. 25 and 32 caliber. Sim Sales Co., Dept. A.R., 2914 Pine Grove Ave., Chicago, Illinois.

.220 SWIFT, .250, .257, 6.5 & 7MM. BLANKS & barrels. Wanted—New; but will consider excellent. A. Shivell, 4323 Sunset Blvd., Los Angeles, Calif.

SPRINGFIELD STRIPPED RECEIVERS, AS ISsued $7.50, heat treated $9.00 each. All parts for .45 Automatic except frames and barrels. Prices F.O.B Phila. No C.O.D.; no orders less than $1.00 please. E. S. Burrell, 717 Wyndmoor Ave., Philadelphia, 18, Pa.

WANTED—AUTOMATIC PISTOLS FOR WAR. American, Spanish, German, calibers .32-.380-.38-.45 and Lugers. Thousands needed. Outside unimportant. Inside good or better. Quote price wanted in first letter. Greenwald & Haughton, 10301 Berea Road, Cleveland, Ohio.

SALE OF SURPLUS GOVERNMENT GOODS Springfield Army rifle slings 1¼" used, fine condition, can furnish any quantity, 75¢ each. Webbing slings 1¼" wide, used, good condition, 45¢ each. Whelen oiled rifle slings, 1", brand new, $1.50. Whelen rifle sling straps 1¼", brand new $1.65. Swivels 75¢ per pair, Springfield sight gauges $1.00. .30-'06 empty brass cases, 75¢ per hundred. Brass clips for .30-'06 cartridges, $2.00 per hundred. Canvas canteen covers fine condition 25¢. U. S. Army Military haversacks, fine condition 60¢. Public Sport Shops, Dept. R-65, 13 S. 16th St., Philadelphia, Pa.

ANTIQUE ARMS REPAIRING. WORK promptly done at moderate prices. Kimball Arms Co., Woburn, Mass. tf

AUTOMATIC PISTOLS FOR AN ALLIED NAtion. All calibers except .25. Outside unimportant. Inside good or better. All makes including foreign. Cash paid date received. Quote price wanted in first letter. Greenwald & Haughton, 10301 Berea Road, Cleveland, Ohio.

WANTED—.45 A.C.P. CYLINDER AND CRANE for new service revolver. Same for S.A.A. Colt. S.A.A. Colt conv. .22, Condition? W/O A. A. Cole, Chico Army Air Field, Chico, Calif.

.32-40 PETERSON BARREL 30" OCTAGON, good, $25.00. Ballard Schuetzen stock, walnut, $5.00. 185 Hornet cases, $3.50. Howard Clark, Summitville, Indiana.

ABOUT 75 WEBLEY & SCOTT SHOTGUN ACtion and barrel assemblies in white without stocks. These assemblies will be sold as a group only, and inspection of this merchandise may be arranged by writing the address given below. We also have a few Circassian walnut blanks for shotguns at $7.50 each and a few curly maple and cherry rifle blanks at $10.00 each. Hoffman Arms Co., Box 2489, Amarillo, Texas.

WANTED—.220, .257, .270 BARRELS AND Mauser actions. R. Vail, Warwick, N. Y. 11-43

BINOCULARS, SCOPES, SIGHTS AND CAMERAS

WANTED—LYMAN JUNIOR TARGETSPOT OR Lyman Targetspot in 8 or 10 power, will pay cash. Joe Fingal, 414 Maryland Ave., Wilmington, 55, Delaware.

WANTED — FOR CASH, A REASONABLY priced, 10 power scope sight and mounts. Have 2 boxes Remington caliber .30, 170 grain S.P. Will trade for 2 boxes .22 Hornets. Edward Wallace, 307 S. Fares Avenue, Evansville, Ind.

FOR SALE—NEW 20X B.&L. SPOTTING SCOPE and Freeland stand, $55.00. Certified check or M.O. G. L. LaFlam, 217 Wildwood Ave., Pitman, New Jersey.

WANTED—MOUNT AND HUNTING SCOPE, for M30 Remington, Jr. 30 Redfield and 330 Weaver preferred. Jack Frenzl, Appleton, Wisconsin.

MOREAU CLAIR BINOCULARS 8X25, COWHIDE case, excellent, $45.00. M.O. please. Roy Bakkum, Waukon, Iowa.

ARGUS C-Z, NEW, EVEREADY CASE, ROLL Kodachrome, $50.00. Complete. No trades. W. J. Curry, Duncansville, Pa.

WANTED—BAUSCH & LOMB OR ARGUS SPOTting scope; Lyman or Fecker target scope, any power. Front sight inserts from Lyman No. 17-A and No. 77 front sights. Mail me the inserts you are not using. Will pay 10¢ each. W. P. Klapp, Paoli, Pa. 11-43

EASTMAN SPEED GRAPHIC, SIZE 5X7, anastigmatic lens, F 4.5, ash tripod, plush lined leather case, 6 double plate or cut film holders. Also other articles, $75.00. Eastman 3¼X5½ Kodak Special, range finder model, lens F 6.3 anastigmat, velvet lined leather case. 3 supplementary lens, tripod. Also other articles, $45.00. Genuine Lemair Paris field glass, 6 power, fine glass case, $25.00. Above articles used very little. Like new. Harry S. Hart, Box 11, Newberry, Michigan.

WANTED—BAUSCH & LOMB, ZEPHYR LIGHT binoculars, 9X35, central focus, with case. Perfect condition. State price wanted. Don Kessler, 824 Fifth Avenue, Huntington, W. Va.

WORLD'S FINEST, 6X30 LEITZ (LEICA) binocular. Center focusing, high illumination and resolution, wide field, latest featherweight type, perfect, in factory box, $112.00. W. Hunt, 600 First Nat. Bank, Minneapolis, Minn.

WANTED—FOR M70, SCOPE MOUNT FOR Zeiss Zielvier featherweight. Prefer Stith or Griffin & Howe. Give all details in first letter. John L. Baird, Life member, R.D. 2, Canonsburg, Pa.

WANTED FOR CASH, PRISM BINOCULARS, Field Glasses, Microscopes, Sextants, Surveyors and Builders Levels. Give description and price in first letter, all mail answered. Big Ben Mercantile & Loan Co., 179 Third Street, San Francisco, California. tf

THE ORIGINAL SIGHT-EXCHANGE, BOX J, Paoli. Pa. Gun Sight Specialists. Mail us your old sights and tell us what you want. - 1-44

WANTED—LATE MODEL HENSOLDT SCOPE. Will buy rifle if necessary to get the glass, also want good pair of binoculars. Lloyd Raab, Vashon, Washington. 12-43

HENSOLDT, 8X56, CENTRAL FOCUSING, Nacht, Dialyt, lightweight, excellent condition, $250.00. Busch, 8x24, individual focusing, like new, $55.00. Leitz, 8x30, central focusing, lightweight, excellent condition, $100.00. Zeiss, 8x24, central focusing, Turachtem, excellent condition, $85.00. Leitz, 6x24, central focusing, Binolit, like new, $100.00. Hensoldt, 8x26, central focusing, Travel Dialyt, excellent condition, $75.00. Leitz, 12x60, central focusing, Mardocit, standard weight, $225.00, brand new. Public Sport Shops, R-65, 13 S. 16th St., Philadelphia, Pa.

CAMERA, EXCELLENT, EASTMAN KODAK F. 6.45, extra lens, tripod, films, $40.00. Adrien Grenier, North Grosvenordale, Conn.

SELL—MIRAKEL DAYLUX BINOCULARS, 8 x 24, with case very good, $45.00. E. A. Sieberns, Nevada, Missouri.

"TACKHOLE DOT," THE FLOATING CENTER, round dot reticules for telescope sights. Target types, $5.00, Weaver 330 or 440, $6.00. Write for price on all other hunting types and free illustrated folder. Endorsed enthusiastically by shooters everywhere. 100 per cent accurate. Fastest. Guaranteed. Prompt Service. Weaver scopes stocked. T. K. Lee, PO Box 2123, Birmingham (1), Alabama. 12-43

SHOOTING GLASSES, 48 X 60MM. "WOODite" blue-green processed lenses. Unsurpassed for glare protection. Double braced best gold-filled frame, $15.00. Money back if not satisfied. Supply limited. Woodbury Optical Company, 6th & Pierce, Sioux City, Iowa.

BINOCULARS, FIELD GLASSES, TELESCOPES, watches, diamonds, jewelry. Buy, sell, trade. Write Paul Schweer, Donnellson, Iowa. 4-44

B. & L. NEW OR USED DRAWTUBE SCOPE urgently required by Army officer to "hunt down those animals which call themselves the typical Jap Army" in the Solomons. Must be excellent condition. Edith Marty, Rapid City, South Dakota.

HENSOLDT 10 X 50 DIALYT BINOCULARS, case, $175.00. Sidney Morris, 3051 Washington Blvd., Cleveland Heights, Ohio.

WANTED—FECKER, LYMAN OR UNERTL scope not less 1⅛", 12 power. With or without mounts. Also want Stevens .22-.410 rifle-shotgun. George T. Morgan, Coxsackie, New York.

WANTED—LYMAN ALASKAN ALLWEATHER hunting scope. L. H. Sisco, Clifton, N. J.

8 X 25 COLMONT BINOCULARS, VERY GOOD, $50.00. 6 x 30 U. S. Naval gun factory. Out of line, other ways excellent, with cases, $40.00. L. M. Springer, 2017 20th St., N.E., Canton, Ohio.

WANTED—WINCHESTER 8 POWER SCOPE with click mounts. Frank B. Miller, Jr., Point Marion, Pa.

WANTED—BACK ISSUES RIFLEMAN, 1923 TO 1938 inclusive, condition suitable for binding. B. & L. Prismatic scope and stand. 12X Fecker 1½" or Lyman Super Targetspot scope. Perfect condition. R. O. Sinclaire, 333 Seaspray Ave., Palm Beach, Florida.

BINOCULARS REPAIRED—WE REPAIR, CLEAN, make replacement and properly collimate all makes, foreign and domestic binoculars and field glasses. Buy, sell and trade in. Mail in your glasses for estimate. General Precision Optical Co., 20 W. Franklin St., Baltimore, Md. tf

BINOCULARS CLEANED AND REPAIRED. Established 1925. Alignment corrected to 1/1000 radian on our special collimator. Mail your glass for estimate. Mirakel Optical Co., Mount Vernon, N. Y. 11-43

—For the best Equipped Army and Navy in the world—

Service specifications call for pretty rigid inspections, the aim is high, but Blackinton's sights are set just as high in the production of service insignia for all of Uncle Sam's fighting nephews.

GENE MITCHELL

V. H. BLACKINTON & CO.

The oldest name in insignia

P. O. Box 261 Ben Franklin Station
Washington, D. C.

NEW AND USED FIELD GLASSES BOUGHT, sold and exchanged. J. Alden Loring, Owego, N. Y.

WANTED—WEAVER 1X SCOPE, R MOUNT. B. H. Smith, Severn, Md.

DAMAGED, OLD AND POOR CONDITION cameras (small size) and damaged binoculars wanted. Foreign preferred. Give particulars and price. S. de Ranitz, Prairie du Chien, Wisconsin.

WANTED—CASH FOR CAMERAS, BINOCULARS, telescopes, firearms. Good guns wanted in trade. National Camera Exchange, 11 So. 5th St., Minneapolis, Minn. 3-44

MIRAKEL DAYLUX BINOCULARS, MECHANICALLY and optically perfect, case $42.50; Albada finder for 50 and 135mm. Contax lens, new $8.50. F. F. Tubbs, 3647 Lilac, Lansing, Michigan.

EXCELLENT 29S WITH POST, T-1, $11.00; new 329, T-3, $5.00; also T-2. George Lindsay, Wendell, Idaho.

ANTIQUES & CURIOS

ILLUSTRATED CATALOG OF ANTIQUE PISTOLS, Rifles, Swords, Rapiers, daggers. Armor: 25¢. Robert Abels Shop, 860 Lexington Avenue, New York. tf

OFFERING COLLECTION OF HIGH GRADE cased double muzzle loading shotguns by famous makers. Also listing some desirable flint and percussion rifles in shooting order. Specify which list wanted. Stamp please. Kimball Arms Company, Woburn, Mass.

WANTED—ANTIQUE FIREARMS; POWDER flasks; gun books. Will buy entire collections—cash. James Serven, Box 1777, Santa Ana, California. tf

PREHISTORIC STONE TOMAHAWK, $75.00. 100 good Prehistoric Arrowheads, $3.00. 10 tiny perfect bird arrows, $1.00. Spearhead 25¢. List free. Caddo Trading Post, Glenwood, Arkansas. tf

INDIAN RELICS, BEADWORK, MINERALS, fossils, coins, curios, pistols, books, old glass. Catalogue 5¢. Vernon Lemley, Osborne, Kansas. tf

REVOLVERS, MINERALS, STAMPS, COINS, glass, Indian relics. Catalogue 5¢. Las Cruces Curio Store, Las Cruces, New Mexico. tf

WANTED — ANTIQUE FIREARMS. ENTIRE collections or single items. Send description and price. T. J. Cooper, R-7, Meadville, Pa. 2-44

WANTED—FOR CASH: .44 COLT AND REMington Percussion Revolvers, poor to fine. Robert Abels, 860 Lexington Avenue, New York.

MUZZLE LOADING RIFLE, HEADQUARTERS, by famous makers: Hawken's, Demick, Gemmer, Meyer, Lehman, Golcher, Kentucky. Many others. Largest collection in Middle West. Large list, 20¢. Geo. Bruellesauer, 3957a Castleman, 10, St. Louis, Mo.

WANTED—FOR CASH: ANTIQUE PISTOLS, rifles, swords, daggers, World War rifles, relics, collections, single pieces. Robert Abels, 860 Lexington Avenue, New York. tf

COLLECTION OR SINGLE PIECES PURCHASED at fair prices. Give full description. Kimball Arms Co., Woburn, Mass. tf

---

Here is another Alvin Linden booklet, the third in his popular series

FIREARM DESIGN and ASSEMBLY

"Shaping the Inletted Blank"

54 pages of real dope and drawings about laying out and then forming the gunstock after the blank has been inletted. With two large sheets of full-scale patterns of designs for the Model 70 Win. action. Price, $2.10. Send for descriptive folder of this and the two others available.

"Inletting the Stock Blank"
"Finishing the Gunstock"

Published by

THOMAS G. SAMWORTH
Plantersville South Carolina

OFFICIAL MOVIES

"Fundamentals of Rifle Marksmanship"

Four reels, black and white, silent	$120.00
Three reels, black and white, sound	120.00
Six reels, black and white, sound	195.00

N.R.A. film, based on U. S. Marine Corps training with the .30 caliber Springfield. Adaptable for small bore training, as well.

"Pistol Bullseyes"

Three reels, black and white, silent	$90.00
Two reels, black and white, sound	80.00

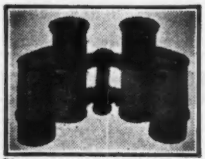
N.R.A. film, now adopted as official training film for the U. S. Army.

Members and affiliated clubs may rent these films from the N.R.A. rental library. Please make reservations in advance.

Rental Charge—Rifle (3 and 4 reels)	$5.00
Rifle (6 reels)	8.00
Pistol (2 and 3 reels)	3.75

NATIONAL RIFLE ASSOCIATION
Scott Circle Washington 6, D. C.

BINOCULARS—PRISM



SPOTTING SCOPES

We repair, overhaul, make replacements and accurately collimate all foreign and domestic makes of PRISM binoculars and spotting scopes. Former Ordnance Naval officer.

MARYLAND PRECISION OPTICAL CO.
"Instrument Contractors to Government"
1 & 3 N. Carey St. Baltimore, Md.

WISLER "PLUGS" ALONG!

"Pluggin' along" thru the manifold problems created by war and the many additional burdens entailed. STILL, HOWEVER, carrying foremost in our minds, the problems of shooters and making every possible effort to *deliver the goods.* To the end that we may quickly win and again be able to deliver *all* items shown in our catalog. *We may still have something you need in stock.* Write us, it's worth a try!

WISLER WESTERN TARGETS
543 Clay St. San Francisco, 11

CAMERAS WANTED

CASH FOR ENTIRE PHOTO & SPORTING GOODS STOCKS.

Warshal's *Sporting Goods*

FIRST & MADISON SEATTLE, 4.

CAMP PERRY?

Not this year. But ! ! ! Custom pistol stocks now—For the future, $6.00. Name gun for folder and patterns.

Lew Sanderson, 14887 Muirland, Detroit 21

THE
HUNTING RIFLE

BOOKS ON HUNTING

The Hunting Rifle—Whelen	$4.75
Book of the Springfield—Crossman	4.00
Military & Sporting Rifle Shooting—Crossman	4.50
Duck, Geese & Swan of North America	4.50
.22 Caliber Rifle Shooting—Landis	3.75
Modern Shotguns & Loads—Askins	4.00

NATIONAL RIFLE ASSOCIATION
Scott Circle **Washington 6, D. C.**

Chemistry GIVES YOU **A NEW GUN**

MAJ. CHAS. ASKINS, Dean Amer. Arms Experts, Celebrated Writer: "Excellent deep-blue finish with surprising speed." **NO HEATING — Not a paint. COLD CHEMICAL PROCESS responds instantly—ON CONTACT!** Transforms rustiest guns into new fire-arms in minutes. Unsurpassed for patching. Color control. For tools, too! At outstanding Sporting Goods and Hardware stores everywhere. Avoid disappointment. accept no imitation. **YOUR DEALER HAS IT. ASK FOR IT BY FULL NAME.**

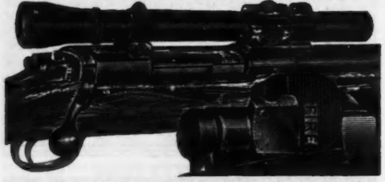
Generous Package $1.00

GUN-BL
GUN-BL
GRAHAM'S MILITARY
GUN-BLU

GRAHAM CHEMICAL CO.
2749 Fenwick Ave., Balto, Md.

MILITARY **GUN-BLU**
THE CELEBRATED COLD CHEMICAL PROCESS

IDEAL SIDE LEVER SAFETY



Designed for 70 Win. Operates freely. Easily installed. Complete instructions. $2.50 postpaid or installed in bolt. Available out of stock. Folder. **SPECIAL SCREWS** for attaching WEAVER T mounts (regular side mounts) to guns. 25¢ pair, prepaid. **SOME TILDEN MOUNTS now available. Write.**

TILDEN MFG. CO., 2750 N. Speer Blvd., Denver, Colo.

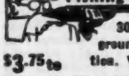
MORE GAME!

With the Merit Iris Shutter Eye Piece on your favorite rifle. You'll get the MOST out of it—maximum accuracy and efficiency—more game. Instant choice of 12 click adjusted apertures while aiming assures clearest definition of sights and target in a flash. If your dealer can't supply, write today for FREE CATALOG.

$3.00
Models for most peep sights

MERIT GUNSIGHT CO., Dept. 10M
6144 Monadnock Way **Oakland, Cal.**

SHOOTING GLASSES



Shooting—Hunting
Fishing—Driving

We still have a limited supply. Get yours now before it is too late.

30-day Trial. Also ground to your prescription. Write for booklet.

$3.75 to $12.50 **W. H. BELZ, INC., Opticians, 2 E. 44th St., New York**
Specialists in Fitting Shooting Glasses.

X-RING BULLET TRAP

1. Stops bullets by Friction
2. Saves the lead for reuse
3. The SAFEST backstop known

Only X-RING offers the centrifugal trap. Safe for all types of shooting—heavy or light caliber. Portable. Self-contained lighting. Saves lead in clean, usable condition. FREE illustrated folder.

X-RING PRODUCTS
503 North St. **Peoria, Ill.**

New Designs in
FRANZITE GRIPS

Modernize YOUR GUN! Improve YOUR SCORE!
Most durable grips made. Positively unbreakable! For Colt, Smith & Wesson, Hi-Standard, Ortgies, Luger and Mausers in a wide choice of beautiful designs in ivory, pearl, walnut, onyx, etc. Low prices. FREE CATALOG. Dealers Wanted.

SPORTS INC., (Mfrs.) 2850 N. Clark St., Dept. A-10 Chicago, Ill.

There is a **FECKER**
TELESCOPE SIGHT
& SPOTTING SCOPE

for every purpose, and for every rifle. For the highest grade precision Telescope, *write for folder to:*

J. W. FECKER
2016 PERRYSVILLE AVENUE
PITTSBURGH, PA.

•

Telescopic Sights ***Spotting Scopes***
Team Scopes

INDIAN RELICS, CONFEDERATE BILLS, coins, minerals, gems, fossils, crystals. Illustrated catalog 5¢. 100 ancient arrowheads $3.00. H. Daniel, Hot Springs, Arkansas. tf

MISCELLANEOUS

THE REVOLVER TIMING RECORD. A 10-inch RCA-Victor phonograph record. Practice timed and rapid fire anywhere, by yourself. Nothing to watch—just listen. For dry shooting, basement and outdoor ranges. One side, 10 second timing, other side, 20 second timing. Plays on any phonograph, $1.50, postpaid. The Original Sight-Exchange, Box J, Paoli, Pa. 1-44

SHOTGUN COVERS, ALL LENGTHS $1.00. Household thermometers, new 75¢ value, brand new, 25¢. Physicians thermometers, pocket style with case, brand new, 3 for $1.00. Gun oil, 1-oz. bottles, 15¢ each, $1.50 per dozen. Public Sport Shops, Dept. R-65, 13 S. 16th St., Philadelphia, Pa.

$1.00 ATMOSPHERE AND VELOCITY SLIDE rule. Used. Directions on rule. Cost $10.00. Weil's Curiosity Shop, 12 Strawberry St., Philadelphia, Pa.

AUTOMATIC PISTOLS FOR AN ALLIED NAtion. All calibers except .25. Outside unimportant. Inside good or better. All makes including foreign. Cash paid date received. Quote price wanted in first letter. Greenwald & Haughton, 10301 Berea Road, Cleveland, Ohio.

ADIRONDACK MAPLE SYRUP, EXPRESS PREpaid. No ration stamp. Write for information and price. Clarence L. Fisher, Lyons Falls, New York.

COMMANDO TYPE KNIVES COMPLETE WITH leather sheath, grooved wooden handles, heavy steel blade, brass handguard, leather thong, blade less than 6", $3.95. Blade approximately 7", $4.95. Add 5¢ for postage and mailing charges. M. & H. Sporting Goods Co., 512 Market Street, Philadelphia, 6, Pa.

2-5 HORSE JOHNSON, 1942, PERFECT, $125.00, pull stacker. 1-3 horse Johnson, 1938 single, perfect, $65.00, pull stacker. Gabriel Pacciarelli, 1447 Nelson St., Utica, N. Y.

WANTED—MISCELLANEOUS COPIES OF THE RIFLEMAN prior to 1942 and including 1935. J. A. Parker, Box 413, Melbourne, Fla.

WANTED—JOHNSON OUTBOARD MOTORS. State Model, condition and best price. I pay express. Fred Wehman, 111 Meeting St., Charleston, South Carolina.

TRADE—A FINGERPRINT COURSE COMplete wtih corrected exams and tools. A. L. Terhaar, 6425 Cross St., Jacksonville, Fla.

WANTED—RUBBER BOOTS, SIZE 9 OR 10, hip height, light weight, duck hunting boots, new or same as. Fred Wehman, 111 Meeting St., Charleston, South Carolina.

PHOTOSTAT COPIES MADE FROM YOUR Marriage or Birth Certificates or similar papers. Postpaid to you same day we receive order. Fifty cents for single copy or 3 copies, $1.00. War stamps accepted. Photo Copy Service, E. P. McCanna, Life Member NRA, 312 Park Ave., Rockford, Ill.

WANTED—TO BUY HUNTING KNIVES OF ALL descriptions. Public Sport Shops, Dept. R-65, 13 S. 16th St., Philadelphia, Pa.

WANTED AUTOMATIC PISTOLS FOR WAR. American, Spanish, German, calibers .32-.380-.38-.45 and Lugers. Thousands needed. Outside unimportant. Inside good or better. Quote price wanted in first letter. Greenwald & Haughton, 10301 Berea Road, Cleveland, Ohio.

$4.00. STEEL SAFE DEPOSIT BOXES. 14X14 inches. Double lock protection, valuable papers, jewelry, money. Mail orders filled. Weil's Curiosity Shop, 12 Strawberry St., Philadelphia, Pa.

COMMANDO KNIVES, 7½" RAZOR SHARP, double edge blade of finest steel, with guard, laminated leather handle, leather sheath and leg thong, $10.00. Extra heavy 9" blade, as above, $12.00. Order now. Louis P. Loutrel, 95-16 105 St., Ozone Park, 16, N. Y. tf

CASWELL TARGET CARRIERS GIVE THE shooter every possible point because they hold the target steady and require no exertion to operate. Fully equipped with speedy ball-bearing pulley wheels and target holders for every type of indoor paper rifle or pistol targets. Caswell Target Carriers, Anoka, Minn. tf

21 JEWELED HAMILTON WATCH, 16 SIZE, $30.00. 19 jeweled South Bend, 12 size, $22.00. Other watches, gasoline lanthern. Quakenbush, Trempealeau, Wis.

AIREDALE PUPS, LITTER REGISTERED, males, $25.00, females $15.00. Satisfaction guaranteed. Wm. E. Walters, Franklin, Tenn.

WANTED—ONE MODEL HD, 2½ HP JOHNSON Motor in excellent condition. State price. J. W. Baldwin, 314 Waggoner Bldg., Wichita Falls, Texas.

FREE TO PIPE SMOKERS—FOR A NEW PIPE smoking thrill, write us your brand of tobacco and get Free package. Mild, tasty, Natural-Flavored "Green River." Pete Moberly, Box 974, Owensboro, Kentucky.

BOOKS YOU SHOULD READ: MODERN GUNsmith, Howe, $15.00. Complete Guide to Handloading, Sharpe, $7.50. The Bullet's Flight, Mann, $6.00. The Officer's Guide, $2.50. Gun Care and Repair, Chapel, $3.75. Advanced Gunsmithing, Vickery, $4.00. Modern Gunsmithing, Clyde Baker, $4.50. The Amateur Guncraftsman, Howe, $4.00. Latest editions sent post paid for your check. Gopher Shooters Supply, Faribault, Minn.

SOFT LEATHER GOLF WOOD COVERS, $1.10 prepaid, set of three. Decoys, special sale, Mallard drakes and hens, $1.29 postpaid. .30 caliber 1 pc. brass cleaning rods, $1.25 each. Iron dumb bells from 2 to 25 lbs. 25¢ per lb. shipped express, charges collect. Air rifle pellets caliber 177—$2.00 per thousand. Caliber .22—$2.50 per thousand. .38 Special cartridge cases Chrome-Western for small primer, shot once, $1.00 per hundred. Public Sport Shops, R-65, 13 S. 16th St., Philadelphia, Pa.

PATENTS—LOW COST. EASY TERMS. BOOK and information free. Highest references. L. F. Randolph, Dept. 370, 416-5th St., N. W., Washington. tf

RECEIVED TOO LATE TO CLASSIFY

WINCHESTER .30-30, $45.00. WINCHESTER 64, .32-20, $45.00. S.&W. .32-20, $37.50, all excellent. Also ammunition. Want 12 gauge Magnum. George Killinger, Burlington, Iowa.

SELL—WINCHESTER LEADER 3¾-1¼-4, 3⅛-6-16 gauge, 15¢ each. .22 L. R. 2¢ each. Stamp please. Wanted—Expensive Double, 12 or 16, cash. T. R. Vail, Industry, Illinois.

VARMINTER, 2R, COMPONENTS. FEW BOXES .270 .30-'06, .250-3000 ammunition. Send stamped addressed envelope for list and price. L. Elwood, 12304 Wyoming, Detroit, Michigan.

PRIMERS, 5M WINCHESTER 116, 5M REMington 1½, @ $15.00 per M. Custom Reloading. F. Emerson, Auburn Street, Auburn, Mass.

CUSTOM STOCKS FOR TARGET AND HUNTing rifles. Stock alterations, repairs and refinishing. Frank J. Wahl, 133 South Street, Bogota, New Jersey.

TRADE—FOX STERLINGWORTH, 12 GAUGE double barrel shotgun, full, modified choke, 30" barrel, excellent. Wanted—Colt Super .38 automatic, ammunition. Seymour Bogdonoff, 317 Lee, Hampton, Virginia.

WANTED—WINCHESTER M12 SKEET, 28 gauge ribbed, describe, give serial number. J. Batson, R-1, Hyattsville, Maryland.

COLT'S OFFICER'S MODEL REVOLVER, CALIber .22, perfect, $65.00. Major Albert Riedinger, Hq. 1st. Group, ARTC, Ft. Knox, Kentucky.

SELL—VERY GOOD GOVERNMENT SPRINGfield Sporter, No. 1406843, scope blocks. .48 rear. Redfield ramp front, extra complete bolt. 160 cartridges, 487 bullets, 500 primers. Schmitt resizer, seater and primer pocket punch, $120.00. Details on request. Ray Gelineau, General Delivery, Laconia, New Hampshire.

SELL OR TRADE—LEFEVER 12 GAUGE, 32 inch, single barrel, Trap. Excellent in, good out, $35.00. Iver Johnson .32 pistol, 6 inch barrel, holster, very good, $20.00. Model 75 Winchester match rifle, excellent, $40.00. Wanted—.38 Wadcutter mould, .38 Special match pistol, S.&W. or Colt .22 match pistol, S.&W. or Colt .38 primers. Trade —.380 Remington automatic, very good, holster, cartridges for .22 match pistol. Robert D. Heiser, Danville, Pa.

WANTED—UP TO ONE CASE SIXTEEN GAUGE ammunition. Have new gun no ammunition. Will trade 300 bullets, 100 grain caliber .270 and 300 primers and 300 bullets 130 grain. Want Weaver 330. Jim Copeland, Oakgrove, Louisiana.

SAVAGE 430 OVER & UNDER 12 GAUGE, 28 inch barrel with improved cylinder, modified choke, Jotsam pad. Perfect in, excellent to perfect out. Price $55.00. R. Deckard, 636 Pine Street, Lancaster, Pa.

SELL OR TRADE—.30-40 KRAG RIFLE, AS issued, except that forearm has been shortened. Condition good, price $22.50. Also O'Hare micrometer 50¢. Earl E. Rinck, West Alexandria, Ohio. Life Member.

FOR SALE—.25 KRAG (NO SIGHTS) WITH blocks, with ammunition $50.00. Krag Hornet with 440, ammunition, $85.00. Mod. 12-12 gauge 30 Full, excellent, $50.00. Will take in trade .330, 75 Sporter or 57 Winchester same condition. U. S. ½ inch drill, $40.00. 1½ inch Jacobs chuck $6.00. 1¼ inch Jacobs $7.50 new. Will buy Model 11, 20 gauge Full. Delbert Wells, Salem, Ind.

WINCHESTER CARBINE. .30-30, $40.00. 52 Sporter, $85.00. Savage .303 Featherweight, T.D., $60.00. No. 45, .250-3000, $60.00. 23 A.A., $30.00. Sedgley .30-'06, $100.00. Parker G.H., 12-28, $75.00. 9mm Erfurt Luger, $40.00. All new condition, ammunition. H. Van Winkle, Stane Ridge, N. Y.

ANSLEY H. FOX, GRADE "AE", (SAVAGE Arms Company), automatic ejectors, two triggers, straight grip, 20X28, modified and Full, perfect, with 100 shells, $110.00. Browning Lightning Over & Under, 12X28 improved cylinder and modified, appearance about good, otherwise excellent, rib, previous model, single selective trigger, 100 shells, $125.00. Latest Browning Over & Under, Lightning Model, 12X26 improved cylinder and modified, plain rib, single selective trigger, perfect, with 100 shells, $150.00. Winchester Model 42 Standard. 410X28 modified, perfect, with 100 shells, $55.00. State load and make preferred, also second choice. Robert Haelig, Boundbrook, N. J.

TRADE—SMITH & WESSON REG. POLICE, .32 Long, $33.00; Hi-Wall .218 Bee, ammunition; Remington 121A, ammunition; Cartridges—.219 Zipper, .25-35, .32 Remington, .300 Magnum, .357 Magnum, write for details. Want—Lovell .250-3000, .257, .270 or .300 Savage rifle; L.R., Hornet, .35 Remington cartridges. A. French, 4603 Westminister, St. Louis, 8, Missouri.

LEGALLY REGISTERED BROWNING AUTOmatic rifle, Model 1918, No. 26879, .30-'06 caliber, made by Marlin Rockwell Co. Fired only 50 rounds. For sale only to authorized commissioned purchasers, such as law enforcement, official military or allied representative. Want $150.00. J. E. Thiehoff, 3324 N. 48th Avenue, Omaha, Nebraska.

WINCHESTER .30-30 REPEATER, $45.00. REMington 14-.25 caliber, $45.00. Winchester .218 Bee Custom stock and forearm, $45.00. Springfield '06, issue stock, $50.00. Remington 10-12 gauge, $50.00. Winchester 12-12 gauge, $50.00. Stevens 12 gauge Single, $15.00. Stevens 20 gauge Double, $20.00. Mossberg .410 Single, $12.00. Remington No. 10 typewriter, $35.00. Savage 99 barrel, .250-3000, $20.00. Sharps Borchardt action, $20.00. Remington Hepburn action $20.00. Ballard action $15.00. Eagle Luger .30 caliber, holster, $60.00. Have ammunition for all of above extra. What have you to offer? W. C. Barnhart, P. O. Box 74, New Carlisle, Ohio.

IVER JOHNSON PROTECTOR SEALED EIGHT revolvers, .22 caliber, 2½" barrel, blued, brand new in factory boxes, with 100 cartridges, $32.50 each. Iver Johnson Model 1900, .22 caliber 2½" blued, seven shots, brand new in factory boxes, with 100 cartridges, $16.50 each. All cartridges standard make, fresh stock, noncorrosive. Specify Short, Long, or Long Rifle (no Hollow Points). Robert Haelig, Boundbrook, N. J.

.45 COLT, NEW SERVICE, 7½", EXCELLENT, $42.00. .41 Colt, Sideswing, 6", good, $26.00. .380 Colt, excellent, $27.00. .30-'06 Springfield Sporter, excellent in, ammunition, $44.00. .45-70 Winchester repeater, bolt action, good, $18.00. Winchester 12-12 gauge, Poly Choke, nickel steel, Beavertail forearm, excellent in, $66.00. Life Member. Kit Kapp, 6502 Salem Pike, Cincinnati, Ohio.

ONLY A FEW LEFT

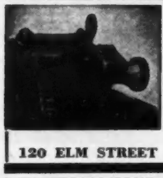
L. C. Smith Field Grade, 12 gauge, 26" barrel..	$63.60
NEW Win. Model 65, 32/20 WCF, open sights...	51.50
New live leather Gov't 1¼" Sling Straps.........	1.25
Swivels for above 1¼" sling straps. Per pair.....	.60
New Barrels for .45 Colt Automatic..............	3.95
New Magazines for .45 Colt Automatic............	1.65
New Magazines for .32 H. & R. Automatic.......	2.50
Used 32 Shot drum Magazines for Luger..........	8.95
Genuine Mills Web Belts, 16 & 20 gauge only, ea.	1.50
Magazines Service Model, only .22 caliber.......	3.50
Regulation Holsters, .45 auto. 1911 Model.......	2.75
Crossman Pellets, 177 & .22 calibers, per M.....	1.75

● WE BUY GOOD USED GUNS FOR CASH ●

Send 3 cent stamp for list Rifles and Revolvers

HUDSON SPORTING GOODS CO.

R-52 Warren St. ($2 Deposit C.O.D.'s) New York



RICE PEEP SIGHTS
for the
KRAG & ENFIELD RIFLES
Windage and elevation.
Anyone can mount.
PRICE $1.50 EACH
LEROY RICE
120 ELM STREET WELLINGTON, OHIO

SUPERIOR HOLSTERS AND BELTS

S. D. MYRES SADDLE CO.
EL PASO, TEXAS
Write for Catalog

WANTED AUTOMATIC PISTOLS FOR WAR. American, Spanish, German, calibers .32-.380-.38-.45 and Lugers. Thousands needed. Outside unimportant. Inside good or better. Quote price wanted in first letter. Greenwald & Haughton, 10301 Berea Road, Cleveland, Ohio.

SELL—REMINGTON MODEL 11, 12 GAUGE, full choke, solid rib, excellent, $60.00. Colt .25 automatic, good, box ammunition, $18.00. Fecker 1⅛", 8 power scope. Fecker mounts, ½ minute clicks, extra 12 power eyepiece, $68.00. E. Grundeman, 809 N. Oneida St., Appleton, Wisconsin.

WEAVER 29S WITH 6X LITCHERT OBJECTIVE, T2 mount, $22.50. Ideal tool, .30-'06 muzzle resizer and shell expander, .311 plug, new condition, $6.50. Bullets—Ideal #308334 (type metal) sized .311, $1.25 per 100. .38 Special, wadcutters, sized and lubricated, $1.10 per 100. Claude Graves, 632 N. Linwood, Indianapolis, Indiana.

FOR SALE—COLT .38 D.A., BARREL PERFECT. except slight blue wear at muzzle. Heiser hand carved holster and cartridge belt. 100-.38 Specials, $65.00. Model 12, Winchester 12 gauge. 30 inch full choke, solid rib barrel, two sights, recoil pad, perfect except blue worn on receiver, $75.00. Model 12 Winchester, 12 gauge trap, 30 inch ventilated rib, full choke barrel, large fore-end, pistol grip stock, extra nice wood. Recoil pad, perfect, $125.00. Floyd Impson, Auburn, Iowa.

TRADE ON SHOT SHELLS. WINCHESTER heavy duck gun with comp. and twelve boxes magnum duck loads. Three-barrel twelve gauge and .22 caliber. Pair 9X30 binoculars, all factory condition. Ben Tarman, Quincy, Penna.

FOR SALE—37 REMINGTON, LATEST, SElected, excellent to perfect, 1000 Match ammunition, $100.00. Remington-Enfield Sporter, Vaver sights, Bishop stock, excellent, 200 Rounds late ammunition, $65.00. Colt .45 automatic, excellent, $45.00. Smith & Wesson .45, 1917, excellent, $45.00. Luger automatic, .30, excellent, $35.00. 25 Colt automatic, very good, $20.00. Ortgies .32 automatic, excellent, $25.00. 48 Lyman sight for Remington 30S, never used, $10.00. Austrian straight pull mannlicher, Sporter stock, action and stock good, barrel poor, $20.00. B. G. Dwyer, 748 Chenango, Binghamton, 6, New York.

SELL OR TRADE—WINCHESTER TRAP, SOLID rib, excellent, $90.00. 52 heavy barrel 48 F.H., 17, excellent, $80.00. .300 Savage, beautiful wood. 40 shells, $65.00. Will pay cash for .30 or .35 Remington, 16-97, 63, .38 Officer's Model, Woodsman, Winchester .410 and shells, Money order please. Charles Wilkins, Luke, Maryland.

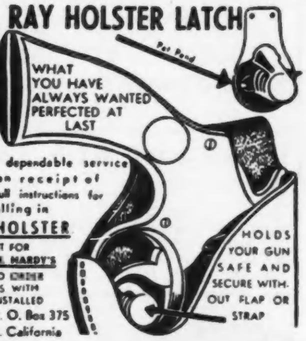
CROWN GRADE SMITH D.B. 12 GAUGE, 32" barrels. Hunter one trigger, excellent, 150 Super X No. 4-5-6. Old leather case. Two hundred dollars. N. E. Walker, R.R. No. 3, Plymouth, Indiana.

WANTED—ONE CASE 12 GAUGE 6'S, 1 CASE mixed 12, 16, 20's. For club use, not for resale. Larry Calligan, Hillsdale, Michigan.

Bean's Duck Hunting Parka

We believe this will be the most popular Duck Hunting garment we ever sold. Made of water-repellent Poplin with "Nupel" woven cotton back also water repellent treated. Lining looks and feels like lambskin. Mr. Bean prefers it to lambskin. It is practically as warm, lighter weight, and not as stiff. Detachable hood makes two garments. Color, Forest Green. Sizes: Small—Medium—Large—and Extra Large. Price $12 postpaid. Send for New Fall Catalog.

L. L. Bean, Inc., Clothing Dept. #11, Freeport, Maine
Mfrs. Hunting and Camping Specialties


WHAT YOU HAVE ALWAYS WANTED PERFECTED AT LAST
Pat Pend
HOLDS YOUR GUN SAFE AND SECURE WITHOUT FLAP OR STRAP

THE AL RAY HOLSTER LATCH

A perfectly natural lightning draw, any make or model either hip, or side. A life-time of dependable service Postpaid on receipt of $1.00, with full instructions for installing in YOUR HOLSTER

AGENT FOR
CAPT. A. H. HARDY'S
MADE TO ORDER
HOLSTERS WITH
LATCH INSTALLED
AL RAY P. O. Box 375
Van Nuys, California

Rifle Schools

Every club can conduct basic rifle training classes for men within the military age who may soon be called into the service. The boss is doing this same kind of work on a large scale for the Navy after these men are in. As a civilian, you can do a lot to help the cause along by teaching these men some of the basic principles of rifle marksmanship.

We still have targets and a lot of other equipment to help you carry on until "Happy days are here again." Write us your needs.

THURMAN RANDLE & CO.
208 N. Akard St., Dallas (1), Tex.

BULLET TRAP $13.00 f.o.b. Detroit

Small, compact, portable, *inexpensive*, and highest efficiency. Size 12" wide, 14" tall, 17" deep. Weight, approx. 42 lbs. For every pistol and revolver up to and including the .357 Magnum. Also for .22 caliber rifle.

DETROIT BULLET TRAP CO.
Box 56, College Park Sta., Detroit, Mich.

A One-Inch Display "Ad"

You can put this space to work *for you* regularly, at a very reasonable cost—only $11.90 per month for 12 consecutive insertions. Rates are slightly higher on an every-other-month schedule, or for single insertions. The circulation of THE AMERICAN RIFLEMAN is now over 65,000 copies monthly—and increasing steadily. We are producing splendid results for dozens of advertisers who use this size space right along. Send us "copy" instructions now, for the next issue.

REBLUING
REPLATING
REPAIRING
REFINISHING
GUN REBLU CO.
322 F Plant Ave. Tampa, Fla.

MODERN
GUNSMITHING
CLYDE BAKER

BOOKS FOR THE GUNSMITH

Modern Gunsmithing—Baker	$4.50
Advanced Gunsmithing—Vickery	4.00
Elementary Gunsmithing—Frazier	2.00
Complete Guide to Reloading—Sharpe	7.50
Textbook of Firearms (Complete Edition)—Hatcher	7.50
The Bullet's Flight—Mann	6.00
Automatic Arms—Johnson	5.00

NATIONAL RIFLE ASSOCIATION
Scott Circle Washington 6, D. C.

Lawrence
STEERHIDE HOLSTERS

Hand-made, lock-stitched, molded to exact fit. Give model, barrel length or send tracing. Under WPB Order M-273, the manufacture of rifle scabbards, pistol holsters, pistol belts is permitted for peace officers, guards, cowboys. At dealers or send for Sporting Goods Catalog.

No. 25 $2.75 SHOWN

THE GEORGE LAWRENCE CO., PORTLAND, ORE.

RUS–T–OFF GUN SATIN

The perfect gun dressing. It immunizes your guns against rust and defacing marks left by constant handling. Removes rust, withstands salt and sulphur fumes. Guns remain dry when used in storm. Full directions on tubes. Sold in sporting goods and hardware stores. Regular tube 25c postpaid.

RUS-T-OFF CHEMICAL PRODUCTS
Box 46 Perry, Michigan

Minute Man
GUN BLUE

Minute Man★GUN BLUE
INSTANT "BLUE STEEL" GUN FINISH
Not a Paint · Not a Lacquer
MAGIC COLD CHEMICAL Restores finish on 5 Guns. No heating! Can't injure steel. Simple process. Takes minutes.
$1
GET Free descriptive circular
NEW METHOD MFG. CO.
Box ARM130 New Method Bldg., Bradford, Pa.

Belding & Mull
RELOADING EQUIPMENT
Complete 130-page B & M Handbook, 50¢. Descriptive folder, free.
Belding & Mull, Philipsburg, Pa.

GUNS WANTED!
Cash FOR SHOTGUNS, RIFLES, & PISTOLS. Write Today
Warshal's Sporting Goods
FIRST & MADISON SEATTLE, 4.

.30—'06
HEADSPACE GAGES
Prompt shipment from stock
1.940-1.946-1.950" lengths—$5.00 each
1.942-1.944-1.948" lengths—$5.50 each
Postage and insurance 8¢ each
L. E. WILSON Cashmere, Wash.

KING
GUN SIGHT COMPANY
171 SECOND STREET · SAN FRANCISCO · CALIF.

WAR WORK, night and day, leaves us little time for regular customers' orders. We'll do the best we can—but ask your indulgence.

SMITH & WESSON
Revolvers
SPRINGFIELD, MASS.

POINTER STOCKS

Molded in walnut and ebony for Colt Woodsman. Hi-Standard all models, $4.50. Colt and S & W $3.50 and $4.50. Molded in Ivory 50¢ extra, for all models. At your dealer or direct. Send for illustrated circular. We are Originators of Plastic Gun Stocks.

WALTER MURAD
1066 El Camino San Carlos, California

SHOOTING and SPORT GLASSES
Calobar • Polaroid
Sage Green • Noviol.... $3.00 to $12.50
Also ground to your prescription
Write for free folder R
STERN OPTICAL COMPANY
1284 Lexington Ave. New York 28, N. Y.

SELL—WINCHESTER ENFIELD SPORTER, 22" barrel, hooded ramp front, Redfield 102 rear, beautiful stock, cheek-piece, recoil pad, excellent in, outside good but could stand rebluing, with 200 gov't. loads, $60.00. Mauser Kar 98, original stock cut to Sporter, excellent in, good out, with 30 hunting loads, $25.00. John Helmacy, Sparta, New Jersey.

.32 WINCHESTER SELF-LOADING RIFLE CARtridges, 165 grain Soft Point, N.M.N.C., fresh stock, (U.S.C.Co.), $6.50 per hundred. Winchester Super Speed, .219 Zipper, 46 grain or 56 grain hollow point, $9.00 per hundred. Peters High Velocity, .32 Remington Rimless (.32 Remington automatic), 170 grain Hollow Point, inner belted, $9.75 per hundred. Winchester Super Speed, .300 H.&H. Magnum, 180 grain Silver Tip, $15.00 per hundred. Assorted makes, .405 Winchester, 300 grain Soft Point, noncorrosive, fresh stock, $12.50 per hundred. .38 Short, Rim-Fire, fresh stock, Black powder, $2.25 per hundred, $10.00 per 500. .30-'06, 1932-1938, 172 grain Full Metal jacket Boattail, $7.50 per hundred. 1936 National Match, $8.50 per hundred. .45 A.C.P. 1932-1938, $6.00 per hundred. Remington Kleanbore .30-40, .220 grain full metal jacket, $10.00 per hundred. Send check or money order. Robert Haelig, Boundbrook, N. J.

WANTED—BROWNING O&U, 30 INCH BARREL trap gun, ventilated rib, S.S.T., F.&M., either standard or higher grade. State lowest price. All letters answered. D. B. Adams, 119 Cynwyd Road, Cynwyd, Pa.

AUTOMATIC PISTOLS FOR AN ALLIED NAtion. All calibers except .25. Outside unimportant. Inside good or better. All makes including foreign. Cash paid date received. Quote price wanted in first letter. Greenwald & Haughton, 10301 Berea Road, Cleveland, Ohio.

WANTED—1903 LOW SERIAL AND 54-'06 ACtions or guns for complete actions cheap; describe fully. Sell—Excellent Springfield Sporters with 29S scopes, 100 game loads; details on request. Howe's Modern Gunsmithing $12.00, Spiller's "More Grouse Feathers" $10.00, both excellent. T. E. Carney, Weston, W. Va.

FOR SALE—W-71; W-94 CARBINE .30-30. BOTH factory new with ammunition. Also W-92, .38-40 new Bbl. very good, $39.00 with 30 rounds. Also ammunition .25-20; .257; .303 British and other. Wanted—Winchester Magnum shot. Walnut Hill, 417½. T. Gies, Hastings, Michigan.

WILL TRADE FOR EXCELLENT WINCHESTER 70-2R Lovell. One Sears Waterwitch, 3½ H.P. Single DeLuxe Outboard motor. Automatic rewind starter, also safety can. Run less than 20 hours. Gas tank dented, otherwise perfect. Instruction book. Philip DeLuce, 677 E. 241 St., Bronx, New York.

WINCHESTER 94-.30 CALIBER, $52.00, SHELLS. 12 power French binoculars, $45.00. Colt automatic .380 caliber, holster, shells as new $35.00. Colt .32 caliber, shells $29.50. Luger 9mm., hundred shells, $55.00. Belding .270 caliber bullet seater, $2.75. Paul Dehner, Burlington, Iowa.

AMMUNITION FOR TRADE—.35 WINCHESTER, 60 rounds. .405 Winchester, 40 rounds. .32 Remington automatic, 40 rounds. .25 Remington automatic, 100 rounds. .22 High Power, 20 rounds. .38 Colt pistol, 50 rounds. .351 Remington automatic, (?) 50 rounds. .401 Winchester automatic, 50 rounds. Would trade for .32 WCF (.32-20) or .30-'06. Might consider buying .35 Winchester rifle, ,32 Remington or .25 Remington. Glen A. Graybill, M.D., Medical Dental Building, Barstow, California.

1 SAUER MAUSER, CUSTOM DELUXE .30-'06, full-ribbed 22" Krupp barrel, full stock, single trigger, excellent, $175.00. 1 Chas. Daly, DeLuxe 7mm. Mauser Sporter, Electro barrel all engraved, single trigger, excellent, $200.00. 1 Griffin & Howe .300 Magnum Mauser with Hart-mounted Noske scope. Bohler barrel, single trigger, excellent, $300.00. 1 Parker V.H.E. Skeet 12 gauge double, single trigger, Beavertail forend, new, $200.00. All excellent to perfect. Forty rounds of ammunition with each gun. Wanted—Mannlicher 6.5mm. and Winchester M95-.30-40 caliber. Write or wire. Elmer C. Breuer, 3616 Troynham Rd., Shaker Heights, 22, Cleveland, Ohio.

FOR SALE—SELLING MY PETS, TOGETHER with quantities ammunition: Model 71, 348 Winchester DeLuxe, D.S.S., peep sight. 15 boxes ammunition, $125.00. .22 High Power Savage, Model 99T, deLuxe, D.S.S., special Sukalle, medium heavy barrel, 24 inches. 34 boxes ammunition, $125.00. Model 1910, .401 Winchester automatic, DeLuxe, D.S.S. fancy checkering on stock and forend. 14 boxes ammunition, $115.00. .300 Savage Model 99T DeLuxe. D.D.S. 17 boxes ammunition, $135.00. .22 Caliber Walther target rifle, single-shot, automatic, or bolt action, fancy DeLuxe Circassian high-comb target stock, Lyman front sight, extension rear peep sight, with Merit disc, 10X Unertl, 1¼ inch objective target scope, Long Rifle high-speed cartridges. A beautiful outfit, $200.00. Custom DeLuxe .30 caliber Newton, Lyman 48 rear, highly figured 3-colored Circassian stock, fancy light-colored horn inlay on cheek-piece, pistol-grip cap, and fore-end; white line recoil pad, D.S.S. with 4X Hensoldt-Daylyt scope and Redfield junior mounts. Eight boxes 180 grain SuperX ammunition. This gun must been seen to be appreciated, $225.00. Rare collector's piece. Holland and Holland Swinburne Martini, with cocking-hammer and safety on right side of action. Fancy Circassian stock and fore-end, medium heavy 26 inch barrel with solid rib attached, chambered for .400-English Express cordite cartridge. Would make excellent chuck rifle or long-range big game rifle, if barrel were relined and chambered, $100.00. Rare collector's piece; also an excellent big-game brush rifle. Westley-Richards, Farquahson, engraved DeLuxe, fancy Circassian stock and fore-end with horn tip. Caliber ,357 Elliott express. 24-inch medium heavy barrel, ramp front sight, with hood, and English folding-leaf express rear sight. 90-.275 grain cartridges. Must be seen to be appreciated, $175.00. Browning O&U, F.&M., 30-inch barrel, raised solid rib, S.S.T. Ivory sights, $125.00. Browning O&U Trap gun. 32 inch F&Imp. Mod., S.S.T.. ventilated rib. Ivory sights, $150.00. Browning O&U 28 inch, Mod. & Imp. cylinder, raised solid rib. Ivory sights, $125.00. Fox single-barrel trap gun. 32 inch ventilated rib, full-choke Model K, extra-fancy checkering and engraving. Beautiful Circassian stock and beavertail fore-end. Ivory sights, $115.00. First money orders received get guns. D. B. Adams, 119 Cynwyd Rd., Cynwyd, Pa.

FOR SALE—.30-40 KRAG SPORTER 24", LYMAN 48, perfect inside and excellent out, five boxes ammunition, custom made stock, extremely accurate, $35.00. A. G. Slade, 111 Frederick Ave., Waterloo, Iowa.

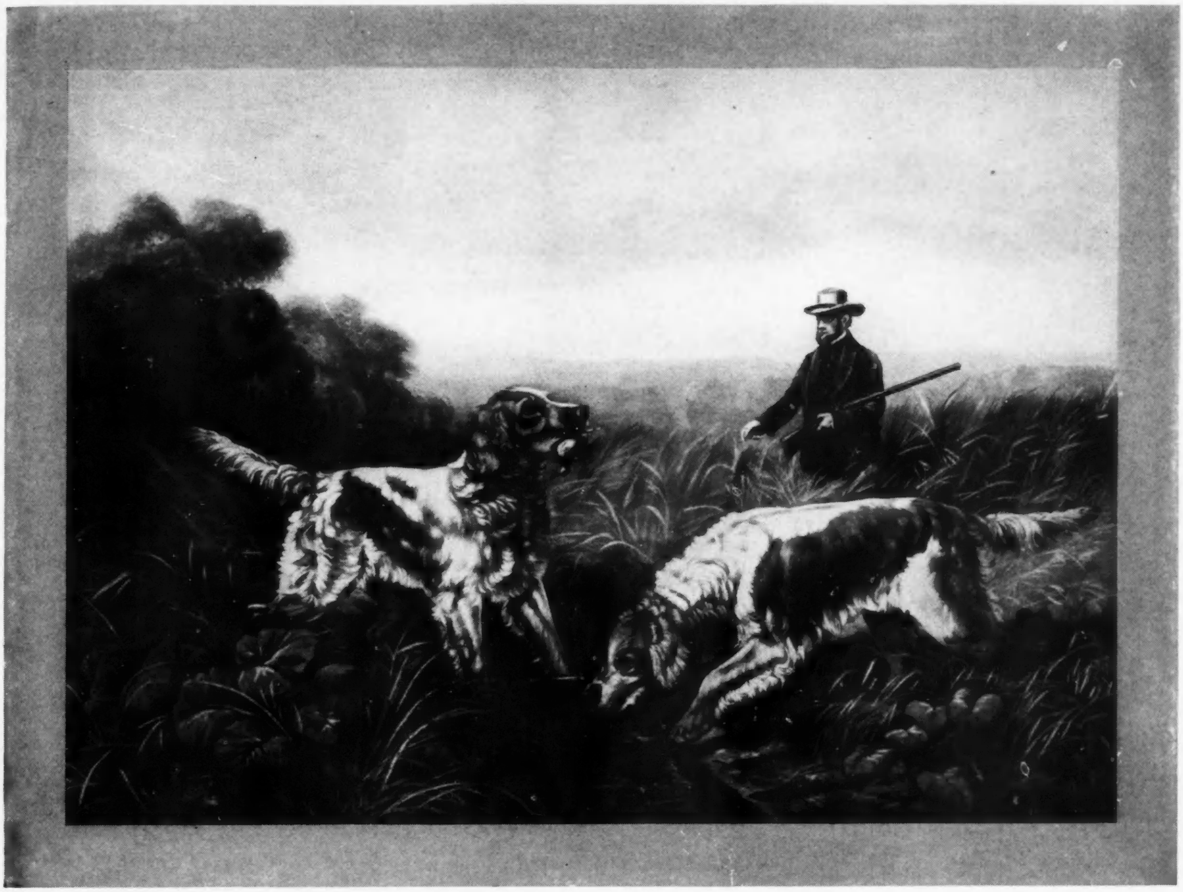
WINCHESTER MODEL 70, .30-'06, LYMAN 48WJS, Gerard 4X hunting scope, post and crosshair, in ultra low, double lever, quick detachable mount. Mount, sling, QD swivels, side safety and scope scabbard by Griffin and Howe. All excellent. $175.00. Another, super grade, 48WJS, perfect, pad, $110.00. Can supply ammunition. Paul E. Boyce, North Branford, Conn.

SMITH AND WESSON OUTDOORSMAN, VERY good Magna and regular grips, Call gold bead patridge sights, also set of regular sights, $65.00. Have few .30-'06 cartridges, 28 to 38 issue 7¢ each. J. B. Pitchford, 300 Delhi St., Bossier City, La.

.30-30 WINCHESTER MODEL 94 RIFLE CUT to carbine, with box shells, very good $45.00. Trade Shells .30-30 for .300 Savage. J. De Smidt, Route #1, Sheboygan, Wis.

WANTED—TWO MAGAZINES FOR 7.65 MM. Luger, excellent condition. Cpl. Milton O. Ruggles, 7013 Palmetto Avenue, Cincinnati, Ohio.

WANTED—SHOTGUNS, DEER RIFLES, SMALL Lathe, Drill Press, Sights, Gun Parts. Andrew Kenney, 7913 Inglenook, Pittsburgh, 21, Pa.



This is a reproduction of one of the rare Arthur Fitzwilliam Tait dog paintings lithographed by Currier & Ives. One or more of this celebrated series has already appeared in this publication. Others will follow.

Help keep the tradition alive

GOOD hunting is an American tradition as old and as honored as America itself.

But in wartime this tradition may be threatened. During the last war, for example, the national game supply was allowed to fall into gravely perilous straits.

During the present war, game restoration associations are doing splendid work. But with so many sportsmen now in the armed services, these associations must depend more than ever on those of you here at home.

We urge you to give them even more than peacetime support. E. I. du Pont de Nemours & Co. (Inc.), Wilmington, Delaware.

DU PONT

REG. U. S. PAT. OFF.

EXPLOSIVES & SPORTING POWDERS

PRESS OF JUDD & DETWEILER, INC., WASHINGTON, D.C.

CHEMISTS... METALLURGISTS... BALLISTIC EXPERTS...
ENGINEERS... SKILLED WORKMEN

Brains had to be rationed too!

Shining like red stop-lights, two facts faced America as she entered this Global War. Cartridge production in astronomical figures was needed. But there was a shortage of *trained* brains to insure that production.

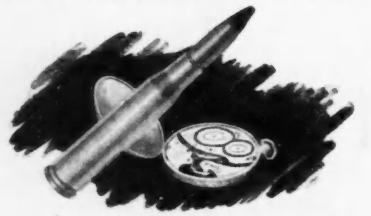
In that moment, official Washington sought the services of the trained personnel of Western and its subsidiaries. And a rationing of those *trained* brains helped break the bottleneck.

Today in Western-operated plants more than 5 billion cartridges of .30 and .50 caliber, and other types, have been produced. Making this possible has been an enormous increase both in our factories at East Alton, Ill., and our Winchester plant at New Haven, Conn. The vast St. Louis Ordnance Plant, also under Western management, is today pouring out more cartridges than all America's small arms ammunitio plants were producing at the end of World War I.

Foreseeing that the demands of automatic weapons in this war might exhaust the supply of copper—key metal in brass cartridge cases—Western developed a new process for working steel that gives *it* many of the properties of cartridge brass.

In addition, Western developed and made available to the United Nations their revolutionary smokeless Ball Powder. Made 5 times faster than other smokeless powders, its use stepped up ammunition production tremendously.

These are some of the highlights of Western's war contributions in manufacturing ammunition, metals and explosives. There are many other achievements.



Billions of Cartridges — Built to Watch-like Precision Standards *by Western*

Back of the billions of cartridges produced in Western-operated plants by more than 50,000 Victory workers, is a story of *precision* plus *volume*. Each cartridge passes more than 90 inspections and tests . . . variations as minute as plus or minus 1/4000 of one inch (half the width of your watch's hair-spring) cause rejection of certain components. Fighters who use Western-produced cartridges can be sure of them.

Smokeless Ball Powder — Made 5 Times Faster *by Western*

When America began its rearmament program, Western offered its smokeless Ball Powder to the War Department. A major accomplishment, the process is one of the comparatively few basic powder-making discoveries. Requiring only 3 days, as against 15 for other smokeless powders, this process speeds production 500%.

Steel that Pinch-Hits for Brass *by Western*

Expediting replacement of critical brass, Western developed a process for making cartridge cases from non-directional steel. The patent was given to the Government, making the process available to all ordnance plants and others—*without cost*. Bullet jacket gilding metal also is scarce. So Western has converted its East Alton plant 100% to making copper-coated steel bullet jackets. Result! Five times as many—with *no increase* in copper consumption.

Western CARTRIDGE COMPANY, East Alton, Illinois

Winchester Repeating Arms Company
New Haven, Conn.

The United States Cartridge Company
St. Louis, Missouri

Bond Electric Corporation
New Haven, Conn.

Olin Corporation (Aluminum Division)
Tacoma, Wash.

And Other Divisions
and Affiliates